Q100 CA-N95 -100Pa
Fluid Resistant

CANADAMASQ's new Q100

CANADAMASQ

COMPARISON CHART
for the New CSA Standard (CA-N95) VS NIOSH (N95) for respirators

Health Canada – CSA Standards:
"The guidance includes the same technical specifications as NIOSH but with improvements and additional Canadian requirements"
"Now that the new Canadian standard has launched, the CSA Group will certify to the new standard exclusively as opposed to the IO guidance".

Respirator Requirements	NIOSH 42 CFR 84 Standard	CSA Z94.4.2:21 Standard	Q100 Features	Q100 Advantages
Inhalation / Maximum Resistance of Breathing, Pa	≤343 Pa - No requirement to mark or inform user of the degree of inhalation/exhalation (a surrogate for breathability)	3 levels of breathability, from easier breathability/lower resistance results to more difficult/higher resistance results. ≤100Pa (10.2mm H20) ≤175Pa (17.8mm H20) ≤343 Pa (35 mm H20)	≤100Pa (10.2mm H20) vs NIOSH standard of ≤343 Pa	The Q100 Respirator achieved the least inhalation resistance of the three CSA categories making the Q100 up to four times more breathable than NIOSH approved respirators. Increased breathability greatly enhances wearer comfort.
Exhalation / Maxmium Resistance of Breathing, Pa	≤245 Pa - No requirement to mark or inform user of the degree of inhalation/exhalation (a surrogate for breathability)	3 levels of breathability, from easier breathability / lower resistance results to more difficult / higher resistance results. ≤100Pa (10.2mm H20) ≤175Pa (17.8mm H20) ≤245 Pa (25mm H20)	≤100Pa (10.2mm H20) vs NIOSH standard of ≤245 Pa	The Q100 Respirator achieved the least exhalation resistance of the three CSA categories making the Q100 up to four times more breathable than NIOSH approved respirators. Increased breathability greatly enhances wearer comfort.
Inhalation / Exhalation Resistance	No requirement to mark or inform the user of the degree of inhalation / exhalation, which is a factor for breathability.	Requirement to add a suffix to the particulate filtration designation to inform users if the inhalation/exhalation testing falls within 3 levels of breathability (from easier breathability/lower resistance results to more difficult/higher resistance results)	Q100 achieves 100Pa/100Pa which is clearly labelled on the product.	Labelling allows wearers to be certain that the Q100 Respirator received the highest standard for inhalation and exhalation vs other NIOSH approved respirators.
Fit Testability	No definition for single - use respirators, isoamyl acetate qualitative test for others	Quantitative fit test method for all respirator types other than loose fitting PAPRs.	The Q100 Respirator has been CSA certified using the more stringent quantitative method for all 4 Q100 Respirator sizes.	Quantitative testing is more accurate than the qualitative testing often used by NIOSH. A proper fitting respirator ensures the respirator provides maximum protection against airborne particles, such as viruses and bacteria.
Filter Classification	N/A	CA-N95F-100Pa CA-N95F-175Pa CA-N95F- 343Pa CA-N95-100Pa CA-N95-175Pa CA-N95- 343Pa	CA-N95F-100Pa	The Q100 Respirator received the highest standard for breathability (100Pa / 100Pa) which is now visible to customers. NIOSH certification only requires the minimum CSA standard of 343 Pa for inhalation and no requirement for exhalation, and there is no indication of which level was achieved.
Shelf Life	Not required	Designation and validation of shelf life for filters and integrated respirators, optional for other components.	3 years from the manufacturing date.	The Q100 Respirator exceeds the highest CSA standards for designation and validation of shelf life. There is no NIOSH requirement for shelf life.
Particle Size	0.075 µm CMD (GSD <1.86)	0.075 µm CMD (GSD <1.86)	0.075 µm CMD (GSD <1.86)	Equivalent to NIOSH
Particle Concentration	<200 mg/m3	<200 mg/m3	<200 mg/m3	Equivalent to NIOSH
Flow Rate	85 L/min	85 L/min	85 L/min	Equivalent to NIOSH
Fluid Resistance	FDA Clearance for surgical use (including fluid / flammability testing) is additional to 42 CFR 84	Fluid / flammable resistance is included as a respirator class.	F Class, Fluid resistance.	Equivalent to NIOSH
Test Agency	NaCL	NaCL	NaCL	Equivalent to NIOSH
Filter Efficiency	≥95.00%	≥95.00%	≥95.00%	Equivalent to NIOSH