

# **KN95 Protective Mask**

Bacterial Filtration Efficiency ≥ 95%

Redacted Version



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## White and black colour options available



### Medical Standard GB19083-2010 & Commercial Standard GB2626-2006 Available

able 2: KN95 specifications							
	Medical KN95 (GB 19083-2010)	Commercial KN95 (GB2626-2006)					
Labelling Information on respirator	<ul> <li>Number and year of publication of standard</li> <li>Type and grade of filter elements (i.e. KN95)</li> </ul>						
Nasal splints	Must be adjustable	N/A					
Mask Harness	<ul> <li>No less than 10 Newton (1kg) per strap</li> <li>Earloops Are Allowed</li> </ul>						
Fit	The mask shall be designed as to provide a good fit and overall fit factor of the mask shall <b>not be less than 100</b>	The disposable facepiece structure shall ensure the tight fitting with face, and be free from deformation during the service life.					
Filter performance – (must be ≥ X% efficient)	≥ 95%	≥ 95%					
Test agent	Sodium Chloride (NaCl) Particles	Sodium Chloride (NaCl) Particles					

### **Medical Packaging Option**

#### **Full Case Count**

- 200 units/ case
- Masks individually wrapped
- Black and white options available
- 85 cases/ pallet

#### **Full Case Dimensions**

- 11.5 x 10.5 x 10 inches



### **Retail Packaging Option**

- Case of 20 in a box
- Includes 4 packs of 5 masks
- Black and white options available





Sponsor

#### Sodium Chloride (NaCl) Aerosol Test Final Report

Test Article: Respirator Face Mask

Study Number: Study Received Date: 03 Feb 2016

Test Procedure(s): Standard Test Protocol (STP) Number: STP0014 Rev 07

Summary: This procedure was performed to evaluate particulate filter penetration as specified in 42 CFR Park at and TEL APP.STP-0050 for requirements on a NSF respirator. Respirators were continued then tested for particle penetration spaint a polytispersed, sodium chioride (NaCI) particulate across. The challenge aerosol was diede, neutralized, and passed through the lest article at a concentration not exceeding 200 mg/m². The initial airflow resistance and particle penetration for each respirator was determined.

According to 42 CFR Part 84.64, pretesting must be performed by all applicants as part of the application process with NIOSH. Results seen below are part of that pretesting and must be submitted to and accepted by NIOSH for respirator approval.

All test method acceptance criteria were met. Testing was performed in compliance with US FDA good manufacturing practice (GMP) regulations 21 CFR Parts 210, 211 and 820.

Results: The NIOSH N95 filter efficiency as stated in 42 CFR Part 84.181 is a minimum efficiency for each filter of 295% (55% penetration). The test articles submitted by the sponsor conform to the NIOSH N95 criteria for

Test Article Number	Initial Airflow Resistance (mm H <sub>2</sub> O)	Particle Penetration (%)	Filtration Efficiency (%)
1	6.9	1.02	98.98
2	6.8	1.23	98.77
3	6.8	1.24	98.76
4	7.0	1.08	98.92
5	6.6	1.12	98.88
6	7.3	1.12	98.88
7	7.1	1.03	98.97
8	6.6	1.13	98.87
9	7.4	1.06	98.94
10	6.9	1.17	98.83
11	6.8	1.18	98.82
12	7.1	1.25	98.75
13	7.5	1.14	98.86

Study Director Brandon L. William

Study Completion Dat

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Study Number Sodium Chloride (NaCl) Aerosol Test Final Report

Test Article Number	Initial Airflow Resistance (mm H <sub>2</sub> O)	Particle Penetration (%)	Filtration Efficiency (%)
14	7.5	1.44	98.56
15	7.4	1.10	98.90
16	7.2	1.37	98.63
17	7.2	1.23	98.77
18	6.9	1.36	98.64
19	7.7	1.26	98.74
20	7.3	1.25	98.75

Acceptance Criteria: The filter tester must pass the "Tester Set Up" procedure. The airflow resistance and particle penetration of the reference material must be within the limits set by the manufacturer.

Filter Test Procedure: Prior to testing, respirators were taken out of their packaging and placed in an environment of  $85 \pm 5\%$  relative humidity (RH) and  $38 \pm 2.5^{\circ}$ C for  $25 \pm 1$  hrs.

The filter tester used in this procedure was a TSI<sup>®</sup> CERTITESI<sup>®</sup> Model 8130 Automated Filter Tester that is capable of efficiency measurements of up to 99.99%. It produces a particle size distribution with a count median diameter of 0.075 ± 0.020 µm and a geometric standard deviation not exceeding 1.86 µm. The mass median diameter is approximately 0.26 µm, which is generally accepted as the most penetrating acrossol size. The reservoir was filted with a 2% NaCl solution and the instrument allowed a minimum warm-up time of 30 min. The main regulator pressure was set to 75 ± 5 pounds per square inch (ns). The filter holder regulator pressure was set to approximately 35 pounds psi. The NaCl serosol generator pressure was set to approximately 30 psi and the make-up airflow rate was set to approximately 0.01 liters per minute (Umini).

The neutralized NaCl test aerosol was verified to be at 25 ± 5°C and 30 ± 10% RH by the acceptance of the manufacturer's reference material. The NaCl concentration of the test aerosol was determined in mg/m² by a gravimetric method prior to the load test assessment.

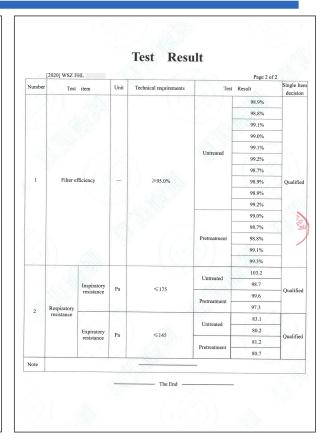
An entire respirator was mounted on a test fixture, placed into the test article holder, and the NaCl aerosol passed through the outside surface of the test article at a continuous airlow rate of  $85 \pm 4$  L/min. In accordance with NiOSH policy, there respirators were challenged until 20  $1 \pm$  5 mg of NaCl had contacted the filter. Based upon the load pattern of NiOSH Type 2, the initial penetration reading of the remaining 17 filters was recorded.

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