NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: 3M Model Tested: 1860

Date Tested: December 14, 2021

These findings pertain to the 3M, model 1860. The packaging and labeling indicate that it is a NIOSH-approved product, under approval number TC-84A-0006. 3M has indicated that this product is likely counterfeit.

Twenty respirators were submitted for evaluation. The samples were tested using a modified version of NIOSH Standard Test Procedure (STP) TEB-APR-STP-0059.

The maximum and minimum filter efficiency was 99.68% and 98.52%, respectively. All twenty respirators measured more than 95% filter efficiency.

This product has head bands/straps. While filter efficiency shows how well the filter media performs, users must ensure a proper fit is achieved.

This assessment is not a part of the NIOSH respirator approval process and will in no way lead to or preclude NIOSH approval through the official approval process. This assessment was developed as an assessment of the filter efficiency for those respirators represented as certified by an international certification authority, other than NIOSH, to support the availability of respiratory protection to US healthcare workers due to the respirator shortage associated with COVID-19. Only particulate filter efficiency was assessed.

The results provided in this letter are specific to the subset of samples that were provided to NPPTL for evaluation.

These results will be used to update the CDC guidance for <u>Crisis Capacity Strategies (during known</u> shortages).

Evaluation of International Respirators



Test: Modified TEB-APR-STP-0059

Date Tested: December 14, 2021

Report Prepared: December 15, 2021

Manufacturer: 3M

Item Tested: 1860

Country of Certification: USA (42 CFR 84)

Pictures have been added to the end of this report.

Filter	Flow Rate (LPM)	Initial Filter Resistance (mmH ₂ O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency (%)
1	85	33.2	1.48	1.48	98.52
2	85	41.2	0.95	0.95	99.05
3	85	33.5	0.52	0.52	99.48
4	85	38.4	0.46	0.46	99.54
5	85	36.1	0.32	0.32	99.68
6	85	38.2	0.53	0.53	99.47
7	85	33.9	0.60	0.60	99.40
8	85	33.1	0.72	0.72	99.28
9	85	30.3	1.24	1.24	98.76
10	85	32.8	0.46	0.46	99.54
-	Minimum Filter Effic	ciency: 98.52%	Maximum Filter Efficiency: 99.68%		

- The test method utilized in this assessment is not the NIOSH standard test procedure that is used for certification of
 respirators. Respirators assessed to this modified test plan do not meet the requirements of STP-0059, and
 therefore cannot be considered equivalent to N95 respirators that were tested to STP-0059.
- Respirators tested may not be representative of all respirators with the same certification mark. NIOSH has no control over suppliers and distributors of respirators certified by other national or international parties.
- This assessment is not a confirmation that it conforms with any or all of its specifications in accordance with its certification mark.
- This assessment was not a part of the NIOSH approval program. These results do not imply nor preclude a future approval through the NIOSH respirator approval program.

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Filter	Flow Rate (LPM)	Initial Filter Resistance (mmH ₂ O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency (%)	
11	85	33.8	0.35	0.35	99.65	
12	85	29.7	0.32	0.32	99.68	
13	85	31.3	0.38	0.38	99.62	
14	85	33.3	0.69	0.69	99.31	
15	85	31.7	0.63	0.63	99.37	
16	85	28.7	1.34	1.34	98.66	
17	85	30.3	0.50	0.50	99.50	
18	85	38.4	0.43	0.43	99.57	
19	85	34.4	0.46	0.46	99.54	
20	85	25.4	0.91	0.91	99.09	
N	Minimum Filter Efficiency: 98.66%			Maximum Filter Efficiency: 99.68%		

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 respirators. Respirators assessed to this modified test plan do not meet the requirements of STP-0059, and
 therefore cannot be considered equivalent to N95 respirators that were tested to STP-0059.
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3M

N95

Health Care Particulate Respirator and Surgical Mask Respirateur contre les particules pour soins de santé et masque chirurgical

Respirador para partículas y mascarilla quirúrgica para cuidado de la salud

1860





1860





3M

St. Paul, Minnesota, USA 1-800-243-4630 1860 Series Respirators

THESE RESPIRATORS ARE APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:

RESPIRATOR COMPONENTS

	FIL			
ECTION'	1860	1860S	8612F	CAUTIONS AND LIMITATIONS ²
V95	X	X		ABCJMNOP

1. PROTECTION

TC-

84A-0006 84A-4526

N95 - Particulate Filter (95% filter efficiency level) effective against particulate aerosols free of oil; time use restrictions may apply

2. CAUTIONS AND LIMITATIONS

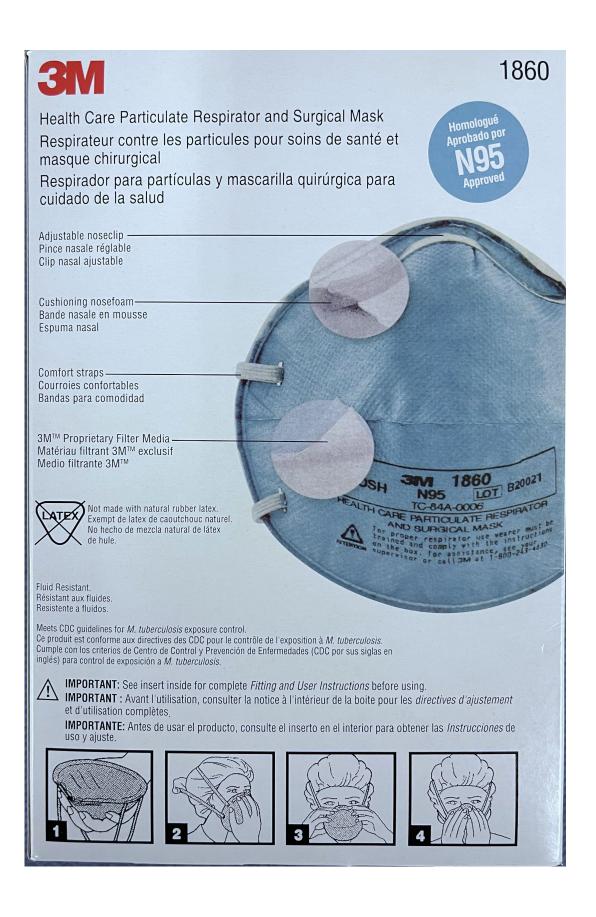
PROTE

N95

- A Not for use in atmospheres containing less than 19.5 percent oxygen.
- B Not for use in atmospheres immediately dangerous to life or health.
- C Do not exceed maximum use concentrations established by regulatory standards.
- J Failure to properly use and maintain this product could result in injury or death.
- M All approved respirators shall be selected, fitted, used and maintained in accordance with MSHA, OSHA and other applicable regulations.
- N never substitute, modify add, or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer
- Refer to User's Instructions, and / or maintenance manuals for information on use and maintenance of these respirators.
- P NIOSH does not evaluate respirators for use as surgical masks.

Rev F: 11-19-07

ABCJMNOP



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