

NPPTL COVID-19 Response: International Respirator Assessment

Manufacturer: 3M

Model Tested: 1860S

Date Tested: August 28, 2020

These findings pertain to the 3M, model 1860S. The labeling indicates that it is a NIOSH-approved product, under approval number TC-84A-0006.

Ten respirators were submitted for evaluation. The samples were tested using the modified version of NIOSH Standard Test Procedure (STP) TEB-APR-STP-0059. This modified assessment plan can be found [here](#).

The maximum and minimum filter efficiency was 98.43% and 97.22%, respectively. All ten 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 [Crisis Capacity Strategies \(during known shortages\)](#).

Evaluation of International Respirators

Test: Modified TEB-APR-STP-0059

Date Tested: August 28, 2020

Report Prepared: August 28, 2020

Manufacturer: 3M

Item Tested: 1860S

Country of Certification: USA (42 CFR 84)

Pictures have been added to the end of this report.

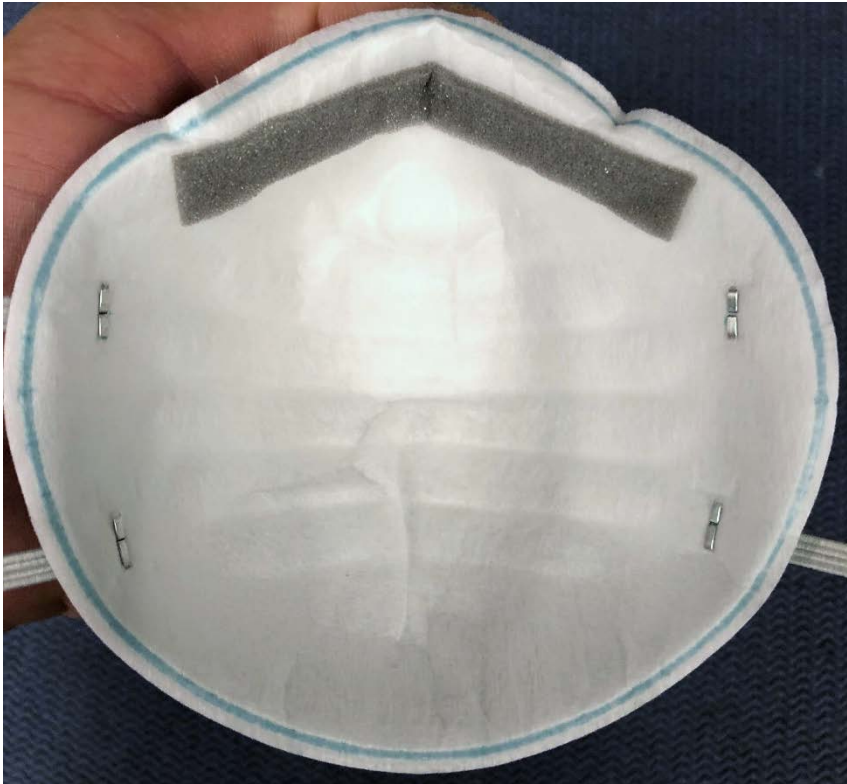
Filter	Flow Rate (LPM)	Initial Filter Resistance (mmH ₂ O)	Initial Percent Leakage (%)	Maximum Percent Leakage (%)	Filter Efficiency (%)
1	85	10.2	0.90	2.08	97.92
2	85	10.0	1.05	2.08	97.92
3	85	10.0	0.71	1.60	98.40
4	85	10.9	1.20	2.42	97.58
5	85	10.7	1.38	2.78	97.22
6	85	9.9	0.92	2.11	97.89
7	85	11.4	0.85	1.77	98.23
8	85	10.1	1.03	2.19	97.81
9	85	9.1	1.14	2.68	97.32
10	85	10.7	0.65	1.57	98.43
Minimum Filter Efficiency: 97.22%			Maximum Filter Efficiency: 98.43%		

- 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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