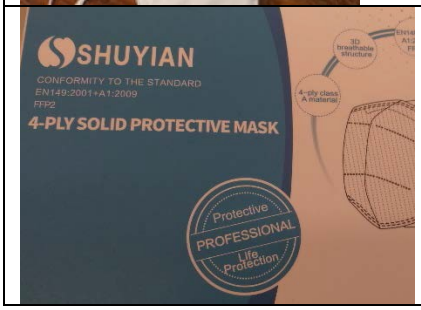
Test Results

Respirators help protect against certain particulate contaminants but do not eliminate exposure to or the risk of contracting any disease or infection. Misuse of a respirator can result in exposures that can result in sickness or death.

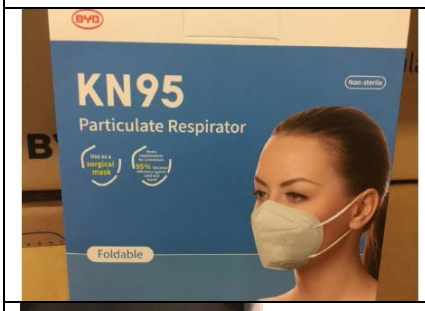
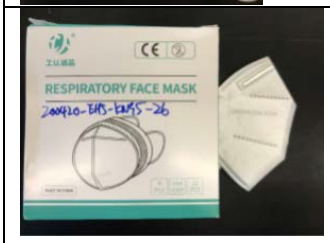
The test results below indicate the performance of the filtration material specific to the respirator tested. The materials were tested using specialized equipment and protocols, similar but not equivalent to the NIOSH standard procedure TEB-APR-STP-0059; reported filtration efficiencies may differ accordingly. These results do not guarantee that all respirators produced by a manufacturer will have a similar level of filtration efficiency or a similar level of resistance to fluid penetration. These results do not imply a fitness for a particular use or compliance with any federal or international standards. These respirators were not tested in an accredited National Institute for Occupational Safety and Health (NIOSH) testing laboratory, and thus are not NIOSH approved or certified. We have worked with the Advanced Functional Fabrics of America, Inc. (AFFOA) to obtain respirator performance characterization. AFFOA coordinated testing at MIT Department of Chemical Engineering and MIT Lincoln Laboratory where comparable conclusions about mask quality were obtained. The Filtration efficiency measurements listed below were taken by the Massachusetts Institute of Technology. The resistance to fluid penetration measurements below were taken by MIT Lincoln Laboratory.

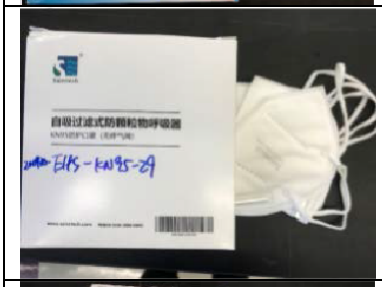
According to ASTM F 1862, surgical masks are tested on a pass/fail basis at three velocities corresponding to the range of human blood pressure (80, 120, 160 mm Hg). Fluid resistance may be claimed if the device passes ASTM F1862 at the corresponding level. Surgical masks that show passing results at higher velocities are more fluid resistant. The test results below indicate the performance of the specific mask tested.

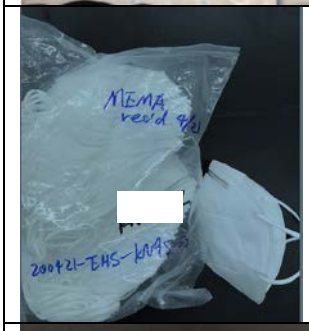
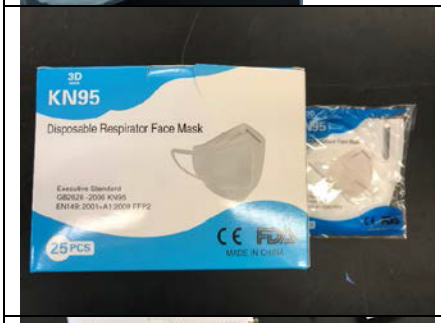
	POWECOM Test date – 4/18/20 - Filtration efficiency: 90.6% Test date – 4/17/20 – Filtration efficiency: 92 % Visit CDC website for additional information on this product

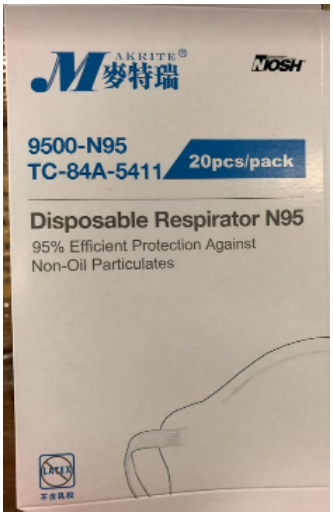
	Jiangsu Nanfang Medical CO. LTD Test date – 4/17/20 – Filtration efficiency: 90.3% Test Date – 4/24/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through
	Foshan Wei hui Labor Protection Products Co., Ltd Test date – 4/17/20 – Filtration efficiency: 84.2% Test Date – 4/24/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through, but partial layer penetration along seams
	Unlabeled – plastic bag with KN95 on the mask Test date – 4/17/20 – Filtration efficiency: 28.1%
	KN-95 Disposable Face Mask Test date – 4/16/20 – Filtration efficiency: 52.3% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through, but partial layer penetration along seams
	SHUYIAN Test date – 4/16/20 – Filtration efficiency: 87.6%

	PinzTec Test date – 4/16/20 – Filtration efficiency: 83.6%
	SDI Folding Anti-Particulate respirator Test date – 4/16/20 – Filtration efficiency: 91.4%
	ESOUND Med Test date – 4/23/2020 – Filtration efficiency: 88.2% Test date –4/27/2020 – Filtration efficiency: 86% Test Date – 4/29/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through
	Drager Test date – 4/24/2020 – Filtration efficiency: 95% Test Date – 4/29/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through
	AOXING Test date – 4/24/2020 – Filtration efficiency: 87.8% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through, but partial layer penetration along seams

	Dasheng Model DTC3X Test Date – 4/24/2020 – Filtration efficiency: 88.7% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through Visit CDC website for additional information on this product
	Americares Emergency Response BYD CARE Test Date – 4/24/2020 – Filtration efficiency: 89% Test Date – 4/29/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through
	KN95 (FFP2) Test Date – 4/24/2020 – Filtration efficiency: 70% Test Date – 4/29/2020 – Penetration Resistance Test: Failed
	GONGRENCHENGPING Respiratory Face Mask Test Date – 4/24/2020 – Filtration efficiency: 85.9% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); but partial layer penetration along stitches
	LVJIANGNAN Test Date – 4/24/2020 – Filtration efficiency: 91.4% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through

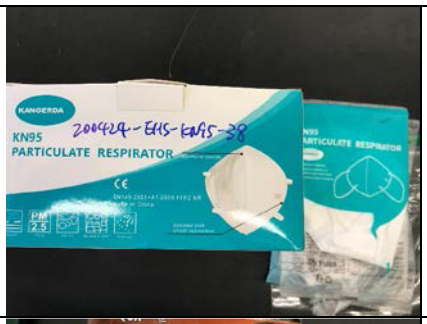
	DASHENG MODEL DTC3W Test Date – 4/26/2020 – Filtration efficiency: 91.8% Test Date – 4/27/2020 – Penetration Resistance Test: Failed
	Saiertech Test Date – 4/26/2020 – Filtration efficiency: 85.9% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through, but partial layer penetration along seams
	OANY Test Date – 4/26/2020 – Filtration Efficiency: 62.3% Test Date – 4/29/2020 – Penetration Resistance Test: **Failed**
	Gerber Outerware Test Date – 4/26/2020 – Filtration efficiency: 77.3% Test Date – 4/29/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); no soak through
	PURVIGOR Test Date – 4/27/2020 – Filtration efficiency: 73.4% Test Date – 4/29/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); but partial layer penetration along stitches Visit CDC website for additional information on this product

	JCH Industrial, Hong Kong Test Date – 4/27/2020 – Filtration efficiency: 86.7% Test Date – 4/29/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); but partial layer penetration along stitches
	Lamdown Test Date – 4/27/2020 – Filtration efficiency: 87.4% Test Date – 4/27/2020 – Penetration Resistance Test: Passed High Standard (Level 3, 160mmHg); but partial layer penetration along stitches
	N/A Test Date – 4/27/2020 – Filtration efficiency: 62.6% Test Date – 4/29/2020 – Penetration Resistance Test: **Failed**
	Yiwu Hongbiao Garments Co. Ltd Test Date – 4/29/2020 – Filtration Efficiency: 91.1%
	3M KN-95 Campco, Inc. Test Date – 4/29/2020 – Filtration Efficiency: 95.6%

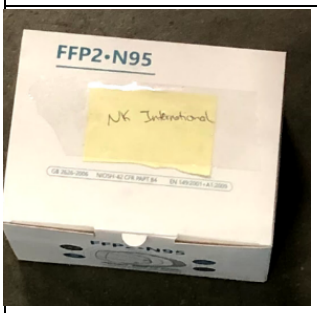
	Makrite Test Date – 4/26/20 – Filtration Effeciency: 91.6%
	Safe Secure Test Date – 4/29/2020 - Filtration Efficiency: 89.8%
	GB2626-2006 KN95 Test Date – 4/29/2020 - Filtration Efficiency: 78.9%

	PM 2.5, 5-pack Test Date – 4/29/2020 - Filtration Efficiency: 73.20%
	HG, 5-pack Test Date – 4/29/2020 - Filtration Efficiency:51.10%
	ONE MIX Test Date – 4/29/2020 - Filtration Efficiency:85.3%
	Huran Test Date – 4/29/2020 - Filtration Efficiency:93.00%

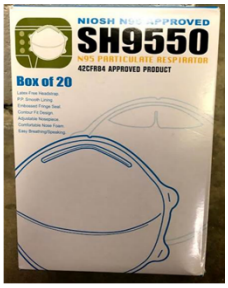
	Ace Neale Test Date – 4/29/2020 - Filtration Efficiency: 92.0%
	Guan Hua Item 9801 Test Date – 4/29/2020 - Filtration Efficiency:84.7%
	Linxia Test Date – 4/29/2020 - Filtration Efficiency:89.2%

	KANGERDA Test Date – 4/29/2020 – Filtration Efficiency: 70.5%
	DROMEX (Campo Inc.) Test Date – 4/30/2020 – Filtration Efficiency: 80.9%
	S. Sansgo Test Date – 4/30/2020 – Filtration Efficiency: 90.0%
	ZHIYI Test Date – 5/5/2020 – Filtration Efficiency: 82.4 %
	Chun Lam Group Test Date – 5/5/2020 – Filtration Efficiency: 86.0%

	DR. MFYAN Test Date – 5/5/2020 – Filtration Efficiency: 45.5% %
	ALLMAN Test Date – 5/5/2020 – Filtration Efficiency: 92.4 %
	Doctor Hua (Jiayuan Technology) Test Date – 5/5/2020 – Filtration Efficiency: 63.4 %
	Shenzhen Zhiyou Test Date – 5/5/2020 – Filtration Efficiency: 61.8%
	Shanghai Huaxiang Woolen Dressing Huaxiang Woolen Test Date – 5/5/2020 – Filtration Efficiency: 84.1 %

	China Southern Test Date – 5/5/2020 – Filtration Efficiency: 72.8 %
	Ocean State Donation Test Date – 5/5/2020 – Filtration Efficiency: 86.0 %
	FFP2 NK International (King Year Printing & Packaging Co. Ltd.) Test Date – 5/5/2020 – Filtration Efficiency: 75.4%
	Model:YH006 (Joint China Ltd.) Test Date – 5/5/2020 – Filtration Efficiency: 81.6%
	BIWEIKANG Test Date: 5/8/2020 – Filtration Efficiency: 85.5%

	Easewell (Easepal Ind. Co. Ltd.) Test Date: 5/8/2020 – Filtration Efficiency: 81.7%
	Makrite (SEKURA) Test Date: 5/8/2020 – Filtration Efficiency: 92.6%
	EATA Test Date: 5/8/2020 – Filtration Efficiency: 73.2%
	Uniair (SAN HUEI United Co. Ltd) Test Date: 5/8/2020 – Filtration Efficiency: 88.9%
	Xier Test Date: 5/12/2020 – Filtration Efficiency: 62.0%

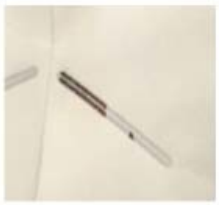
	Spectrum 50-pack Test Date: 5/12/2020 – Filtration Efficiency: 72.5%
	Eko Test Date: 5/12/2020 – Filtration Efficiency: 41.9%
	San Huei United Co., Ltd. SH9550 Test Date: 5/12/2020 – Filtration Efficiency: 86.4%
	In Jeolly Test Date: 5/12/2020 – Filtration Efficiency: 83.4%
	Fujian Meinkind Baby Products, Ltd Test Date: 5/12/2020 – Filtration Efficiency: 71.1%

	50 pack donation Test Date: 5/12/2020 – Filtration Efficiency: 91.1%
	Aumacom Test Date: 5/12/2020 – Filtration Efficiency: 48.5%
	XAM-Med Test Date: 5/12/2020 – Filtration Efficiency: 85.7%

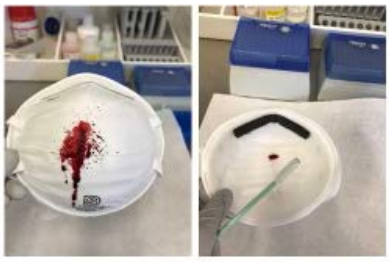
Photographs of Penetration Resistance Tests

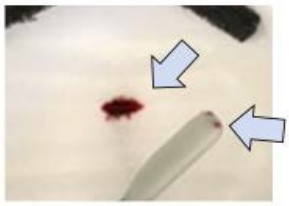
Pass

Pass
with partial penetration along seams



Fail





Presentation Name - 9
Author Initials: MM/DD/YY

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This document will be updated as additional masks and samples are tested