

Report No.	PFE20210127-01	Page 1 of 2
Sponsor	It is being developed under the Misumi brand.	
Address		
Study Number	192036-S01	
Testing Date	27 January 2021	
Expired Date	26 January 2022	
Testing Facility	RUEE, Research Unit of Applied Electric Field in Engineering	
Test Procedure	ASTM F2299-03	

Summary: This procedure was performed to evaluate the non-viable particle filtration efficiency of the test article. Polystyrene Latex (PSL) were nebulized Poly-dispersedly and passed through the test article. The test procedure measures filtration efficiency by comparing between the particle concentration count in the upstream and the downstream ones.

Filtered and dried air is passed through an atomizer to produce an aerosol containing suspended latex spheres. This aerosol is then passed through a charge neutralizer. The aerosol is then mixed and diluted with additional preconditioned air to produce a stable, neutralized, and dried aerosol of latex spheres.

One-minute particle concentration count were performed, with and without the test article in the system. The filtration efficiency was calculated using the average number of particles penetrating the test article compared to the average of the control values.

Area of Test:	12.57 cm ²
Particle Size:	0.1 μm
Face Velocity:	10.6 cm/s
Environment:	22 ±5°C and 48 ±5% relative humidity (RH) for 4 hours
References:	TSI Classifier Model 3082 S/N: 3082001807003, TSI CPC Model 3788 S/N: 3788180801, TSI Manometer Model 8380 S/N: T83801703012
Average Filtration Efficiency:	99.62%

Test Article Number	Upstream Counts (particles/cm ³)	Downstream Counts (particles/cm ³)	Filtration Efficiency
1	1,140.00	4.16	99.64%
2	1,180.00	4.36	99.63%
3	1,100.00	4.28	99.61%
4	1,120.00	4.14	99.63%
5	1,150.00	4.77	99.59%



Study Director Assoc. Prof. Dr. Panich Intra

27-Jan-2021

Study Completion Date

Counterfeiting test report whether it is a whole/part or using a counterfeiting report in any term is an offense under the criminal code.

Tested and Reported by: Research Unit of Applied Electric Field in Engineering (RUEE), 98 Moo 8, Pipong, Dusitkiet, Chiang Mai, 50220, Thailand (RUEEFFEPP-0001)
 Document Designed by: Cryssanne Nilgapan, Head of Information Resource Control Department, Research Unit of Applied Electric Field in Engineering (RUEE) Rev 5

Test Article Number	Delta P (mmH ₂ O)	Delta P (mmH ₂ O/cm ²)	Delta P (Pa/cm ²)
1	43.63	3.47	34.04
2	43.94	3.50	34.28
3	43.08	3.43	33.61
4	43.68	3.47	34.08
5	43.12	3.43	33.64

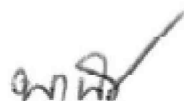
*** End of Report ***

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Reference Note:

Disposable Hygienic Carbon Mask 4PLY



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