

Test Method: ASTM F2299/F2299M-03 (reapproved 2017) Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres

Testing parameters per ASTM F2100-19 Standard Specification for Performance of Materials Used in Medical Face Masks

IBR JN: 22925D5

Date: 16 October 2020

Description of Samples: White/Black Flatsheet Media, Tech 3D Fabrics - Enro, Wash Cycles: 100 washes (718-14-100W)

 Test Area: 45.22 cm²

Date Samples Received: 28 September, 2020

Fluid: Air
 Flow Rate : 28.3 lpm
 Face Velocity: 10.4 cm/s
 Challenge: 0.1µm (±15% CV) Latex Microspheres (Neutralized)

Filter ID	Differential Pressure (mmH ₂ O)	Port	Particles / 2 ft ³	
22925-41	15.2	Upstream	3649975	Temp: 20.9 °C
		Downstream	360904	RH: 44.9 %
		Efficiency (%)	90.11	BP: 727 mmHg
22925-42	14.7	Upstream	3196000	Temp: 21.1 °C
		Downstream	335487	RH: 43.6 %
		Efficiency (%)	89.50	BP: 727 mmHg
22925-43	15.5	Upstream	2435275	Temp: 20.8 °C
		Downstream	264196	RH: 47.0 %
		Efficiency (%)	89.15	BP: 727 mmHg
22925-44	14.2	Upstream	2041425	Temp: 20.9 °C
		Downstream	229889	RH: 45.4 %
		Efficiency (%)	88.74	BP: 727 mmHg
22925-45	13.7	Upstream	1830450	Temp: 20.8 °C
		Downstream	168123	RH: 43.8 %
		Efficiency (%)	90.82	BP: 727 mmHg

Notice: These data relate only to the samples tested. This report may be copied only in its entirety.

Performed By: NG

Data Location: NG-201015

Manufacturer	Model Number	Serial Number	IBR ID	Range of Use	Cal Due
Meriam	50MJ10	G-61188	AF-77	6 - 48 slpm	4/7/2025
Dwyer	477B-1	00AU4U	MAN-57	0.1-20.0 inH ₂ O	7/24/2021
Dwyer	DHII-007	Date Code: A31X	MAN-31	0.1-10.0 inH ₂ O	2/17/2021
Vaisala	HMT330	L5220038	RH-206	12-75%RH/16-27C	1/9/2021
Vaisala	PTU300	R3240750	RH-209	500-1100 hPa	8/11/2021
PMS	Lasair III 110	116514	N/A	0.1-5.0 µm	12/17/2020
PMS	Lasair III 110	102709	N/A	0.1-5.0 µm	3/1/2021

Reviewed By: _____

Daniel R. Miller, Air Labs Manager

Revision	Editorial / Technical	Description	Approved By	Release Date
		Initial release	DRM	10/20/2020