

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: 22925D1

Date: 15 October 2020

Description of Samples: White/Black Flatsheet Media, Tech 3D Fabrics - Enro, Wash Cycles: Before Wash (718-14-0W)

 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	
22925-1	12.2	Upstream	7957000	Temp: 21.4 °C
		Downstream	103960	RH: 45.5 %
		Efficiency (%)	98.69	BP: 727 mmHg
22925-2	11.7	Upstream	10165025	Temp: 21.6 °C
		Downstream	147600	RH: 45.7 %
		Efficiency (%)	98.55	BP: 727 mmHg
22925-3	13.0	Upstream	9930775	Temp: 21.4 °C
		Downstream	153911	RH: 47.6 %
		Efficiency (%)	98.45	BP: 727 mmHg
22925-4	13.2	Upstream	9728125	Temp: 21.4 °C
		Downstream	144645	RH: 45.6 %
		Efficiency (%)	98.51	BP: 727 mmHg
22925-5	12.7	Upstream	9596625	Temp: 21.5 °C
		Downstream	150136	RH: 44.1 %
		Efficiency (%)	98.44	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