

TEST REPORT: 7191239667-CHM20-01-RC
24 JUL 2020



PSB Singapore

RESULTS

Sample Description: Tech 3D (Damon) – Before Wash

Test sample/ controls	Stage 1, CFU	Stage 2, CFU	Stage 3, CFU	Stage 4, CFU	Stage 5, CFU	Stage 6, CFU	Sum of Total plate count for the 6 sieves, CFU	Average Count for Controls, CFU	BFE (%)
-ve Control	0	0	0	0	1	0	1		
+ve Control 1	196	505	812	674	384	178	2749	2797	
+ve Control 2	187	510	807	770	400	170	2844		
Sample 1	0	0	0	0	2	22	24		99.14
Sample 2	0	0	0	0	1	5	6		99.79
Sample 3	0	0	0	0	1	14	15		99.46
Sample 4	0	0	0	0	1	11	12		99.57
Sample 5	0	0	0	0	0	6	6		99.79

TEST REPORT: 7191239667-CHM20-02-RC
24 JUL 2020



PSB Singapore

RESULTS

Sample Description: Tech 3D (Damon) – A/f m/c 20 washes

Test sample/ controls	Stage 1, CFU	Stage 2, CFU	Stage 3, CFU	Stage 4, CFU	Stage 5, CFU	Stage 6, CFU	Sum of Total plate count for the 6 sieves, CFU	Average Count for Controls, CFU	BFE (%)
-ve Control	0	0	0	0	1	0	1		
+ve Control 1	196	505	812	674	384	178	2749	2797	
+ve Control 2	187	510	807	770	400	170	2844		
Sample 1	0	0	0	0	9	55	64		97.71
Sample 2	0	0	0	0	5	40	45		98.39
Sample 3	0	0	0	0	15	60	75		97.32
Sample 4	1	0	0	0	10	66	77		97.25
Sample 5	0	0	0	0	9	70	79		97.18



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: 22183B5 rev 1

Performed for: Proper Cloth
Location: Kowloon, Hong Kong
Contact: Kit Li

Date: 22 July 2020

Description of Samples: Tech 3D (Damon) - Before Wash, flatsheet media

Test Area: 45.22 cm²
Manufactured by TAV Limited (a member of TAL Apparel)
Source: TAL Apparel Ltd.
Date Samples Received: 01 July 2020
Fluid: Air
Flow Rate: 28.3 lpm
Face Velocity: 10.4 cm/s
Challenge: 0.1µm (±15% CV) Latex Microspheres (Neutralized)



Table with 5 columns: Filter ID, Differential Pressure (mmH2O), Port, Particles / 2 ft3, and Test Results (Temp, RH, BP, Efficiency %). Rows include filter IDs 22183-51 through 22183-60.

Notice: These data relate only to the samples tested. This report may be copied only in its entirety.
Performed By: DN Data Location: DN264

Table with 6 columns: Manufacturer, Model Number, Serial Number, IBR ID, Range of Use, Cal Due. Lists equipment used in the testing process.

Reviewed By: [Signature] Daniel R. Miller, Air Labs Manager

Table with 5 columns: Revision, Editorial / Technical, Description, Approved By, Release Date. Shows revision history for the report.

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: 22183B6 rev 1

Performed for: Proper Cloth
Location: Kowloon, Hong Kong
Contact: Kit Li

Date: 22 July 2020

Description of Samples: Tech 3D (Damon) - After 20 washes, flatsheet media

Test Area: 45.22 cm²
Manufactured by TAV Limited (a member of TAL Apparel)
Source: TAL Apparel Ltd.
Date Samples Received: 01 July 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	Temp: °C	RH: %	BP: mmHg
22183-61	8.4	Upstream	7012375	23.8 °C	49.6 %	733 mmHg
		Downstream	615506			
		Efficiency (%)	91.22			
22183-62	8.6	Upstream	7146850	23.8 °C	49.5 %	733 mmHg
		Downstream	734176			
		Efficiency (%)	89.73			
22183-63	8.6	Upstream	7186875	23.7 °C	49.5 %	733 mmHg
		Downstream	675900			
		Efficiency (%)	90.60			
22183-64	9.4	Upstream	7137200	23.5 °C	49.1 %	733 mmHg
		Downstream	641402			
		Efficiency (%)	91.01			
22183-65	9.1	Upstream	7071650	23.7 °C	49.5 %	733 mmHg
		Downstream	829155			
		Efficiency (%)	88.27			
22183-66	9.7	Upstream	7002300	23.7 °C	48.7 %	733 mmHg
		Downstream	540763			
		Efficiency (%)	92.28			
22183-67	9.4	Upstream	7020650	23.6 °C	48.5 %	733 mmHg
		Downstream	694057			
		Efficiency (%)	90.11			
22183-68	9.7	Upstream	7050075	23.5 °C	48.2 %	733 mmHg
		Downstream	681414			
		Efficiency (%)	90.33			
22183-69	9.7	Upstream	6883050	23.4 °C	48.9 %	733 mmHg
		Downstream	696542			
		Efficiency (%)	89.88			
22183-70	9.1	Upstream	6997925	23.5 °C	48.5 %	733 mmHg
		Downstream	679351			
		Efficiency (%)	90.29			

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

Performed By: DN

Data Location: DN264

Manufacturer	Model Number	Serial Number	IBR ID	Range of Use	Cal Due
Alicat Scientific	M-50SLPM-D/5M	99929	AF-113	5-45 SLPM	9/3/2020
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
Testo	511	39111389/505	MAN-51	300-1200 hPa	8/29/2020
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	9/1/2020

Reviewed By: _____

Daniel R. Miller, Air Labs Manager

Revision	Editorial / Technical	Description	Approved By	Release Date
		Initial release	DRM	7/23/2020
1	Editorial	Addition of Damon to sample description and mfg information	DRM	7/31/2020