

**TEST REPORT**

**NUMBER : PAKT20013924**  
**DATE : 17-Dec-2020**

**APPLICANT : American Safety Power Tool (Pvt) Ltd.**  
Plot No. 1&2, 12&13, Sector E-IV  
Phase-II, EPZA, Karachi, Pakistan  
**ATTN : Mr. Abdul Karim**

Sample Description As Declared : Several Pieces Of One (1) Type Of Submitted N95  
Face Mask Sample In White Color.  
Fibre Content : None Given  
Style No. : M-1211786  
Order No. : None Given  
Buyer Name : Qadri & Qureshi General Trading Co. L.L.C.  
Color : White  
End Uses : None Given  
Agent : Safety Material Trading

Applicant Provided Care Instructions :

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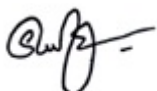
Date Received : Refer To Remark  
Date Confirmation Received :

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**TEST CONDUCTED : AS PER THE REQUEST OF THE APPLICANT. FOR FURTHER DETAILS PLEASE  
REFER TO ENCLOSED PAGE(S)**

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AUTHORIZED BY  
FOR INTERTEK PAKISTAN (PVT.) LTD.



KHAWAR SHARF  
BUSINESS LINE LEADER

(The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. This Report Shall Not Be Reproduced Wholly Or In Parts Without Written Approval From The Laboratory. Measurement of Uncertainty will be provided for applicable tests on request.)

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**CONCLUSION :**

Particle Filtration Efficiency (PFE)

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M = Meet Applicant's Requirement, F = Below Applicant's Requirement, D = Data  
R = See Remark, N/A= Not Applicable, C =Conform Label, NC =Not Conform Label  
# = No Comment

\*\*= Based upon the Weight Per Unit Area the sample is exempt from  
Flammability Testing in accordance with 16 CFR 1610.1(d).

\*\*\* = Based upon the Fiber Content the sample is exempt from Flammability  
Testing in accordance with 16 CFR 1610.1 (d).

Remark: No Sample Was Submitted For Testing, All Test Results Are Referred To Previous Test  
Report Number: PAKT20011043-Rev1 DD Nov 25, 2020.

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TEST CONDUCTED (AS REQUESTED BY THE APPLICANT)

- 1 Determining the Initial Efficiency of Materials Used in Medical Face Masks to Penetration by Particulates Using Latex Spheres  
(ASTM F 2100-19<sup>E1</sup>, Section 9.3, Testing Refer to ASTM F2299-03 (2017))\*

**1. Purpose**

The purpose of this test method is to measure the initial particle filtration efficiency of materials using monodispersed aerosols containing suspended latex spheres particulates of 0.1µm diameter.

**2. Test Method**

ASTM F2299-03 (2017), Modified

The test was performed based on ASTM F2299 with exception that the test procedure incorporated a non-neutralized aerosol challenge as per applicant's request. The non-neutralized aerosol is also specified in the FDA guidance document on surgical face masks.

**3. Test Apparatus and Materials**

- 3.1 Latex sphere particulates penetration efficiency test system
- 3.2 Suspension containing latex spheres particulates of 0.1µm diameter

**4. Test Specimen**

- 4.1 Minimum 5 specimens are required.
- 4.2 Precondition each material specimen at the test duct conditions at 30 to 50±5% relative humidity and a temperature of (21±3)°C.

**5. Procedure**

- 5.1 Set main airflow, dilution airflow and aerosol generator airflow to test conditions
- 5.2 Establish airflow controls at test face velocity 5.33 cm/s. Purge main airflow for 10 to 15 minutes.
- 5.3 Warm-up optical particle counter (OPC) for 15 to 30 minutes.
- 5.4 Install the material specimen in the test system.
- 5.5 Sample and record the upstream and downstream aerosol counts for a minimum of five counts at each position using a 1-minute sampling time.
- 5.6 Average the upstream counts and the downstream counts, then calculate the decimal efficiency by the following definition:  
Efficiency = 1 – penetration = 1- average downstream counts/average upstream counts.

**Results:**

Test Area:	100 cm <sup>2</sup>
Aerosol Challenge:	0.1 µm latex spheres (non-neutralized)
Face Velocity:	5.33 cm/s
Laboratory Condition:	23.0°C, 48.0% Relative Humidity (RH)

Test Specimen Number	Filtration Efficiency (%)	Pass/Fail	
1	99.7%	-	
2	99.8%	-	
3	99.8%	-	
4	99.8%	-	
5	99.8%	-	

REMARK :

\* = Subcontracted To Intertek China

## END OF THE TEST REPORT ##

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