



SUBJECT Physical Test

TEST LOCATION TÜV SÜD China

TÜV SÜD Products Testing (Shanghai) Co., Ltd.
B-3/4, No.1999 Du Hui Road, Minhang District
Shanghai 201108, P.R. China

CLIENT NAME Zhongshan First Mountain Electrical Appliance Company Limited

CLIENT ADDRESS No.31 Hesui Industrial Blvd Suicheng Village, Dongfeng Town, Zhongshan,
Guangdong Province

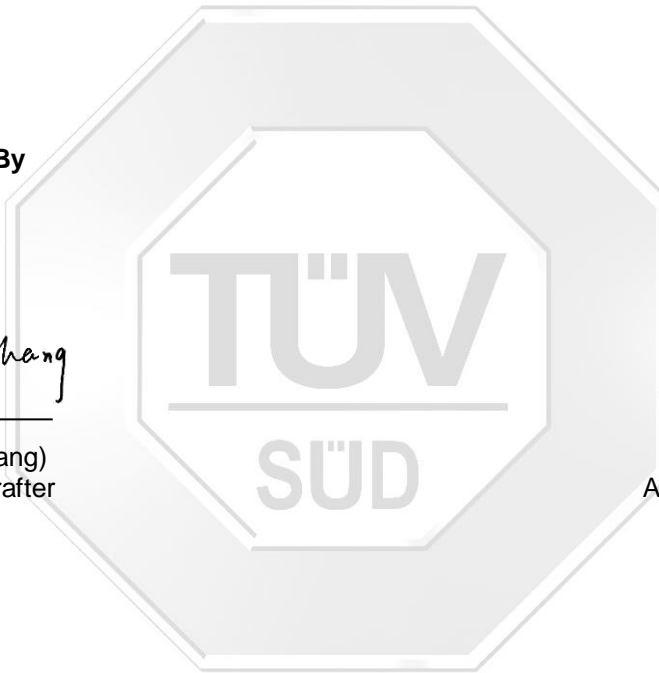
TEST PERIOD 17-Mar-2020~08-Apr-2020

Prepared By

(Anny Zhang)
Report Drafter

Authorized By

(Leo Liu)
Authorized Signatory



Note: (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested.(3) The test report shall not be reproduced except in full without the written approval of the laboratory.(4) Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.

Chemical/Microbiology Laboratory:
TÜV SÜD Products Testing (Shanghai) Co.,
Ltd.
B-3/4, No.1999 Du Hui Road, Minhang District
Shanghai
201108
P.R. China

Phone : +86 (21) 6037 6375
Fax : +86 (21) 6037 6345
Email: food.chem@tuv-sud.cn
Webpage: www.tuv-sud.cn

Regional Head Office:
TÜV SÜD Certification and Testing
(China) Co., Ltd.
No.151 Heng Tong Road Shanghai
200 070 P.R.China

TUV[®]

Differential pressure of a medical face mask

1. Purpose

The purpose of the test was to measure the differential pressure of a medical face mask.

2. Sample description was given by the client

Disposable medical masks(Non sterile)

F001

Manufacture: Zhongshan First Mountain Electrical Appliance Company Limited

3. References

EN 14683:2019 Annex C

4. Apparatus

Differential pressure testing instrument

5. Test specimen

5.1 Test specimen are complete masks or shall be cut from masks. Each specimen shall be able to provide 5 different circular test areas of 2.5 cm in diameter.

5.2 Each test specimen shall be conditioned at $(21\pm 5)^{\circ}\text{C}$ and $(85\pm 5)\%$ relative humidity for the time required to bring them into equilibrium with atmosphere prior to testing.

6. Procedure

6.1 The test specimen is placed across the 2.5 cm diameter orifice (total area 4.9 cm^2) and clamped into place so as to minimize air leaks and that the tested area of the specimen will be in line and across the flow of air.

6.2 The pump is started and the that tested area of the specimen will be in line and across the flow of air.

6.3 The manometers M1 and M2 are read and recorded.

6.4 The procedure described in steps 6.1~6.3 is carried out on 5 different areas of the mask and readings averaged.

7. Calculation

For each test specimen calculate the different pressure ΔP as follows:

$$\Delta P = \frac{(X_{m1} - X_{m2})}{4.9}$$

X_{m1} : is pressure in Pa, manometer M1, mean of 5 test areas, low pressure side of the material;

X_{m2} : is pressure in Pa, manometer M2, mean of 5 test areas, high pressure side of the material;

4.9 is the cm^2 area of the test material;

ΔP is the different pressure per cm^2 of the test material expressed in Pa.



8. Test results

Test Items*		Test Results	Test Methods
Different Pressure Test (Pa/cm ²)	1	34.5	EN 14683:2019 Annex C
	2	35.1	
	3	34.4	
	4	35.5	
	5	33.9	

Note:

1.*denotes this test was carried out by external laboratory assessed as competent.

2.This report is for internal use only such as internal scientific research ,education, quality control, product R&D.

-END OF THE TEST REPORT-

