

EN 149:2001+A1:2009

Respiratory protective devices - Filtering half masks to protect against particles -
Requirements, testing, marking

MEASUREMENT AND TEST REPORT

For



April 26, 2020

This Report Concerns: Original Report	Equipment Type: PM2.5(filter chip-non-medical)
Test Engineer: Eric /	
Report Number: HY20DC-199S	
Test Date: April 20-April 26, 2020	
Reviewed By: Terry/	
Prepared By:	Shenzhen HuaYu Test Technology Co.,Ltd. No. D880, 4th Floor, Building 1, Detai Industrial Park, Huarong Road No. 460, Dalang Street, Longhua New District, Shenzhen

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior written consent of Shenzhen HuaYu Test Technology Co.,Ltd.

TEST REPORT
EN 149:2001+A1:2009
Respiratory protective devices - Filtering half masks to protect
against particles - Requirements, testing, marking

Report

Report reference No. : HY20DC-199S

Tested by (signature) : Eric /

Reviewed by (+signature) : Terry /

Date of issue : April 26, 2020



Testing laboratory

Name : Shenzhen HuaYu Test Technology Co.,Ltd.

Address : No. D880, 4th Floor, Building 1, Detai Industrial Park, Huarong Road No. 460, Dalang Street, Longhua New District, Shenzhen

Test location : Same as above

Client

Name

Address



Test specification

Standard : EN 149:2001+A1:2009

Non-standard test method : N.A.

Test item

Description : PM2.5(filter chip-non-medical)

Model No. : N.A.

Manufacturer

Address

Factory

Address



Model difference : /

Shenzhen HuaYu Test Technology Co.,Ltd.

EN 149			
Clause	Requirement - Test	Result - Remark	Verdict
4	Description		P
5	Particle filtering half masks are classified according to their filtering efficiency and their maximum total inward leakage.	FFP2	P
6	Particle filtering half masks meeting the requirements of this European Standard shall be designated in the following manner		P
7	Requirements		P
7.1	In all tests all test samples shall meet the requirements.		P
7.2	Unless otherwise specified, the values stated in this European Standard are expressed as nominal values		P
7.3	The visual inspection shall also include the marking and the information supplied by the manufacturer.		P
7.4	Particle filtering half masks shall be offered for sale packaged in such a way that they are protected against mechanical damage and contamination before use.		P
7.5	Materials used shall be suitable to withstand handling and wear over the period for which the particle filtering half mask is designed to be used.		P
7.6	If the particle filtering half mask is designed to be re-usable, the materials used shall withstand the cleaning and disinfecting agents and procedures to be specified by the manufacturer.		P
7.7	The particle filtering half mask shall undergo practical performance tests under realistic conditions.		P
7.8	Parts of the device likely to come into contact with the wearer shall have no sharp edges or burrs.	No sharp edges and burrs	P
7.9	Leakage		
7.9.1	The laboratory tests shall indicate that the particle filtering half mask can be used by the wearer to protect with high probability against the potential hazard to be expected.	12 %	P
7.9.2	he penetration of the filter of the particle filtering half mask shall meet the requirements of Table 1.	FFP2	P
7.10	Materials that may come into contact with the wearer's skin shall not be known to be likely to cause irritation or any other adverse effect to health.		P
7.11	The material used shall not present a danger for the wearer and shall not be of highly flammable nature.		P
7.12	The carbon dioxide content of the inhalation air (dead space) shall not exceed an average of 1,0 % (by volume).		P
7.13	The head harness shall be designed so that the particle filtering half mask can be donned and removed easily.		P

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EN 149			
Clause	Requirement - Test	Result - Remark	Verdict
7.14	The field of vision is acceptable if determined so in practical performance tests.		P
7.15	A particle filtering half mask may have one or more exhalation valve(s), which shall function correctly in all orientations.		P
7.16	The breathing resistances apply to valved and valveless particle filtering half masks and shall meet the requirements of Table 2.	Inhalation: 0.7 Exhalation: 2.3	P
7.17	Clogging		P
7.17.1	For single shift use devices, the clogging test is an optional test.		P
7.17.2	Breathing resistance		P
7.17.2.1	Valved particle filtering half masks	3 mbar	P
7.17.2.2	Valveless particle filtering half masks	3 mbar	P
7.17.3	Penetration of filter material		P
7.18	All demountable parts (if fitted) shall be readily connected and secured, where possible by hand.		P

Test	Required level	Test Date	Average value
Paraffin Oil penetration	<6% after 120mg exposure	April. 26, 2020	5, 13%
NaCl penetration	<6% after 120mg exposure	April. 26, 2020	0, 63%
Facial leakage	46 results W% 8 averages in 10W8%	April. 26, 2020	Compliant
Air permeability inhalation 30l/min	W0, 7 mbars	April. 25, 2020	0, 25 mbar*
Air permeability inhalation 95l/min	W2, 4 mbars	April. 25, 2020	0, 73 mbar*
Air permeability exhalation 160l/min	W3 mbars	April. 24, 2020	1, 24 mbar*
Carbon dioxide content	<1, 0%	April. 24, 2020	0, 70%
Flammability	Must not burn or continue to burn for more than 5 seconds after the withdrawal of the flame	April. 24, 2020	Compliant

Remark:

Protection(D): protection against solid and liquid aerosols, combined with resistance higher to clogging tested with dolomite dust

*Average of the test results (Receiving State + Simulated port processing)

Appendix for

Photo 1

