



CERTIFICATE OF TESTING

Reference No.	03-14B/02/2020/38/01-1
Client Company	Mechanical Training Solution Sdn Bhd (MTS)
Client Company Address	20-2, Plaza Damansara, Medan Setia 2, Bukit Damansara, 50490 Kuala Lumpur
Test Item	3D Fashion Mask
Brand/Model	XCOV19
Lot/Batch/Production No.	-
Quantity	9
Date of Sample(s) Received	21 st August 2020
Date (s) of Testing	24-26 th August 2020
Test Specification	See page 2
Testing Laboratory	Dust Mask Laboratory (DML), NIOSH Malaysia

PREPARED BY

:
(Haalah binti Mahmud)

DATE : 27/8/2020

APPROVED BY

:
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DATE : 27/8/2020

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Test Specification

MS 2323:2010 / EN 149:2001 Respiratory Protective Devices – Filtering Half Masks to Protect Against Particles – Requirements Testing, Marking	
Testing	Remark
Penetration	All results are baseline data only. No data comparisons are made.
Breathing Resistance	
Carbon Dioxide	

Samples

No.	Brand	Model	Quantity
1.	XCOV19	3D Fashion Mask	9



Results

Penetration

Sample	Conditioning	Results (%)
PT1	As received	97.6
PT2		96.3
PT3		97.4

Supplementary Information:

1, Each samples are tested with 0.3-micron sodium chloride aerosol at 95 l/min by using TSI High Flow Automated Filter Tester 8130

Breathing Resistance

Sample	Inhalation		Exhalation (Flow = 160 l/m)				
	30 l/m	95 l/m	Forward	Up	Down	Left Up	Right up
BRV1 / AR	0.00	-0.03	0.47	0.50	0.50	0.50	0.52
BRV2 / AR	0.00	-0.28	0.64	0.61	0.64	0.66	0.64
BRV3 / AR	0.00	-0.37	0.66	0.66	0.66	0.66	0.64

Carbon Dioxide Content

Sample	Conditioning	The carbon dioxide content of the inhalation air (%)	
CO1	As received	Average	0.33
CO2		Average	0.41
CO3		Average	0.68

Supplementary Information:

1, Each samples are supplied with 5.0% of carbon dioxide, then allowed to breathe in and out for 2 minutes



Disclaimer

The data obtained in this report are based on the evaluated samples ONLY and may not be applicable to other stockpiles.

Estimates of the measurement uncertainty

Clause	Test	Uncertainty*
7.9.2	Penetration	± 5%
7.12	Carbon Dioxide Content	-
7.16-7.17	Breathing Resistance	± 1.9 mbar

*The uncertainty value is based on a standard uncertainty multiplied by a coverage factor $k = 2$, which provides for a confidence level of approximately 95%. Values expressed as a percentage (%) are relative.

-END OF REPORT-