



DUST MASK LABORATORY (DML)
 NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY & HEALTH (NIOSH)
 Lot 1, Jalan 15/1, Section 15, 43650 Bandar Baru Bangi, Selangor, Malaysia.
 Tel : 03 - 8769 2100 Fax : 03 - 8926 2900 URL : www.niosh.com.my



CERTIFICATE OF TESTING

Reference No.	03-14B/02/2020/24/01-1
Client Company	Honsin Apparel Sdn. Bhd.
Client Company Address	531, Batu 2 1/2, Jalan Kluang, 83000 Batu Pahat, Johor.
Test Item	Filtering Face Piece (FFP)
Brand/Model	ProXMask 90V
Lot/Batch/Production No.	-
Quantity	40
Date of Sample(s) Received	5 th June 2020
Date (s) of Testing	10 - 19 th June 2020
Test Specification	See page 2
Testing Laboratory	Dust Mask Laboratory (DML), NIOSH Malaysia

PREPARED BY :
 (Haalah binti Mahmud)

DATE: 22/6/2020

APPROVED BY :
 (Baderin bin Osman)

DATE: 22/6/2020

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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.
Flammability	
Carbon Dioxide Content	
Breathing Resistance	

Samples

No.	Brands	Model	Quantity
1.	ProXMask	90V	40



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Results

Penetration

Sample	Conditioning	Results	
		Sodium Chloride	Paraffin Oil
PT1	As received	75.6	79.3
PT2		80.5	76.8
PT3		51.6	70.4
PT4	Simulated wearing treatment	74.6	73.3
PT5		76.4	71.8
PT6		56.8	73.8
PT7	Mechanical strength	68.6	73.1
PT8		61.8	82.2
PT9		71.6	82.7
PT10	Temperature conditioned	60.7	74.5
PT11		62.7	86.6
PT12		72.9	84.1

Supplementary Information:

1. Each samples are tested with sodium chloride and paraffin oil aerosol at 95 l/min by using TSI High Flow Automated Filter Tester 8130
2. Maximum penetration reading: <6%

 <small>KEMENTERIAN SUMBER MANUSIA</small>	DUST MASK LABORATORY (DML) NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY & HEALTH (NIOSH) Lot 1, Jalan 15/1, Section 15, 43650 Bandar Baru Bangi, Selangor, Malaysia. Tel : 03 – 8769 2100 Fax : 03 – 8926 2900 URL : www.niosh.com.my	 <small>NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH</small>
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Flammability

Sample	Conditioning	Results
		Not burn or continue to burn for more than 5 seconds after removal from the flame at every exterior part of samples
F1	As received	Comply/Not Comply
F2	As received	Comply/Not Comply
F3	Temperature conditioned	Comply/Not Comply
F4	Temperature conditioned	Comply/Not Comply

Carbon Dioxide Content

Sample	Conditioning	The carbon dioxide content of the inhalation air (shall not exceed an average of 1.0%)	
CO1	As received	Average	0.74
		Comply/Not Comply	
CO2		Average	0.65
		Comply/Not Comply	
CO3		Average	0.63
		Comply/Not Comply	



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Breathing Resistance

Sample	Inhalation		Exhalation (Flow = 160 l/m)				
	30 l/m	95 l/m	Forward	Up	Down	Left up	Right up
	Max: 0.7	Max: 2.4	Max: 3.0				
BRV1 / AR	0.07	0.36	0.66	0.68	0.71	0.69	0.71
BRV2 / AR	0.10	0.59	1.00	0.98	0.85	0.86	0.88
BRV3 / AR	0.05	0.51	0.91	0.90	0.87	0.90	0.90
BRV4 / TC	0.04	0.48	0.85	0.84	0.82	0.84	0.77
BRV5 / TC	0.05	1.01	1.01	1.01	1.01	1.01	1.00
BRV6 / TC	0.06	0.63	0.87	0.87	0.87	0.86	0.86
BRV7 / SWT	0.80	0.05	0.84	0.83	0.83	0.86	0.84
BRV8 / SWT	0.07	0.60	0.84	0.82	0.82	0.87	0.86
BRV9 / SWT	0.08	0.62	0.97	0.96	0.96	0.96	0.96



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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
7.11	Flammability	Note 1

*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.

Note 1 The acceptance criterion for this test is a straightforward "Pass/Fail", rather than a numerical value. Consequently, as there is no value to be reported, uncertainty has not been reported either.

-END OF REPORT-