



IPS TESTING

Test Report
July 31, 2020
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SGS-IPS 01281-20

Report to: Derrick Veillon
Paty, Incorporated
4540 South Pinemont Dr.
Suite 110
Houston, Texas 77041

Sample Identification: **One 45 GSM SMS Blue Material Sample**

Date Received: July 27, 2020

Test(s) Requested: Water Resistance: Impact Penetration, Water Resistance: Hydrostatic Pressure

PO Number: Credit Card

Analysis of One 45 GSM SMS Blue Material Sample

SGS-IPS Testing performed the testing listed above on one 45 gsm SMS blue material sample provided by Paty, Incorporated. The results are listed in Tables 1 and 2 on the following pages.

If you have any questions, please contact us.

Authorized by Mai Pa V. Xiong
MaiPa Xiong
Laboratory Manager

Signed Eric Belter
Eric Belter
Lab Technician
Analytical Services
920-749-3040

Table 1. Water Resistance: Impact Penetration

KH-45G-SMS



AT-1659

Water Penetration (g)



1	0.1
2	0.1
3	0.1
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Average	0.1
Std. Dev.	0.02
Maximum	0.1
Minimum	0.1
n=	3

Test Parameters

Temperature (°C) 27.1

Test Side: Outside
Blotter Lot: 112645

Table 2. Water Resistance: Hydrostatic Pressure

KH-45G-SMS	
Orientation	Outside
  AT-1659	
Hydrohead (mbar)	
1	45.7
2	36.1
3	42.3
Average	41.4
Std. Dev.	4.87
Maximum	45.7
Minimum	36.1
n=	3
Hydrohead (cm of H ₂ O)	42.2
Test Parameters	
Temperature (°C)	22.3
Test Pressure Limit (mbar)	1000
Failure Type	3rd drop

Gradient: 60 mbar/min
 Water Type: Deionized Water

Method(s) and Notes:

All valid results are included in the statistical analyses.
 Revisions of SGS-IPS methods when used are current at the time of testing.
 Samples tested and conditioned in TAPPI standard conditions unless requested otherwise by customer.
 Samples were not preconditioned.

AATCC 42-2017 Water Resistance: Impact Penetration Test

Type II Impact Penetration Tester was used for this testing.
 Samples conditioned in TAPPI standard conditions unless requested otherwise by customer.

The estimated k=2 uncertainty for AATCC 42 is calculated and available on request.

Spray head has a hole in the center, funnel is plastic instead of glass.

Blotter papers used: Ahlstrom Grade 989.

AATCC Test Method 127-2017 Water Resistance: Hydrostatic Pressure Test

Option 2, Hydrostatic Head Tester.

Samples conditioned in TAPPI standard conditions unless requested otherwise by customer.

Analyzed by: EB, TY

Quality review by: MAG

Date(s) of testing: July 29-30, 2020

Room Conditions

	Relative Humidity (%)	Temperature (°F)
Conditioning Environment	51.1	74.1
Maximum during testing	51.7	74.1
Minimum during testing	51.1	73.2

Note: See the method(s) cited above for available estimates of measurement uncertainty. Unless otherwise noted, sampling was performed by customer.

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