



ISO/IEC 17025:2017
Valid Until: 09/05/2021

Report #: R20412-A Rev. 5
Original Date: 07/28/2020
Rev. 5 Date: 07/30/2020

Test Report

CUSTOMER:

ATTENTION: Mr. Galen Killam

Novolex (Corporate HQ)
101 E. Carolina Ave.
Hartsville, SC 29550 USA

Conclusion:

<u>Tested Samples</u>	<u>Standard</u>	<u>Result</u>
Novolex Non-Surgical Isolation	ASTM D1683; Test Method for Failure in Sewn Seams	Pass
Gowns (T Gown)	ASTM D5034; Breaking Force of Textile Fabrics	Pass
Fairfield, Ohio	ASTM D5733-99; Tearing Strength of Nonwoven Fabrics, Trapezoid Tear	Pass
	ANSI/AAMI PB70:2012 Liquid barrier performance and classification of protective apparel and drapes intended for use in health care	Level 1, 2, 3
	AATCC 42; Water Resistance: Impact Penetration Test	Pass
	AATCC 127; Water Resistance: Hydrostatic Pressure Test	Pass
	16 CFR 1610 – Flammability of Clothing Textiles	Pass (Class 1)

SIGNED FOR THE COMPANY BY:

William M. Baumann
Laboratory Director

The test results stated in this report relate only to the item(s) tested.
Tests identified with an asterisk (*) may have been subcontracted.

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Technical Report

Sample ID: Novolex Non-Surgical Isolation Gowns (T Gown) - Fairfield, Ohio

Item 1: ASTM D1683; Standard Test Method for Failure in Sewn Seams

Item 2: ASTM D5034; Breaking Force of Textile Fabrics

Item 3: ASTM D5733-99 ; Tearing Strength of Nonwoven Fabrics, Trapezoid Tear

Item 4: ANSI/AAMI PB70:2012 Liquid barrier performance and classification of protective apparel and drapes intended for use in health care

AATCC 42; Water Resistance: Impact Penetration Test

AATCC 127; Water Resistance: Hydrostatic Pressure Test

Item 5: 16 CFR 1610 – Flammability of Clothing Textiles

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Item 1: Results for Standard Test Method for Failure in Sewn Seams, ASTM D1683 are listed below

Seam, Strength, lbf
ASTM D1683, Modified
Existing seams

Test Unit of Measure	Number of Samples (N)	Sum	Average/Mean	St. Dev	Pass/Fail
lbf	10	109	10.9	0.700	Pass
N	10	485	48.5	3.584	Pass

Table 1 - Requirements: $\geq 30 N (\geq 7 \text{ lbf})$

Item 2: Results for Breaking Force of Textile Fabrics, ASTM D5034 are listed below

Breaking Force of Textile Fabrics, lbf
ASTM D5034
Grab Method
CRE

Test Unit of Measure	Number of Samples (N)	Sum	Average/Mean	St. Dev	Pass/Fail
MD					
lbf	5	73	14.6	2.244	Pass
N	5	325	65	10.733	Pass
TD					
lbf	5	61	12.2	4.069	Pass
N	5	275	55	18.899	Pass

Table 1 - Requirements: $\geq 30 N (\geq 7 \text{ lbf})$

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Item 3: Results for Tearing Strength of Nonwoven Fabrics, Trapezoid Tear, ASTM D5733-99 are listed below

Tearing Strength of Nonwoven Fabrics; Trapezoid Tear ASTM D5733-99 (withdrawn 2008)

Average 5 highest peaks

As Received

Test	Number of Samples (N)	Sum	Average/Mean	St. Dev	Pass/Fail
MD					
lbf	5	18	3.6	0.419	Pass
N	5	80	16	2.097	Pass
TD					
lbf	5	18	3.6	0.419	Pass
N	5	79	15.8	1.720	Pass

Table 1 - Requirements: ≥ 10 N (≥ 2.3 lbf)

Item 4: Results for ANSI/AAMI PB70:2012 Liquid barrier performance and classification of protective apparel and drapes intended for use in health care are listed below

AATCC 42; Results for Water Resistance: Impact Penetration Test are listed below

Fabric Water Penetration, grams

Water Temperature: 79.0°F

Impact Penetration Type II Tester

Test	Number of Samples (N)	Sum	Average/Mean	St. Dev	Pass/Fail	ANSI/AAMI PB 70 Classification Levels
Unit of Measure						
Base Material (g)	5	0	0	0	Pass	1, 2, 3
Sleeve seams (g)	5	0	0	0	Pass	1, 2, 3

Table 1 – Requirements: ≤ 1.0 g

Notes: The amount of water that penetrated the fabric after the spray period is reported in grams weight.

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AATCC 127; Results for Water Resistance: Hydrostatic Pressure Test are listed below

Travel set @ 10 mm / sec.

Water impacts outside of gown

Water Temperature: 70.5°F

Test Material	Unit of Measurement	Number of Samples (N)	Sum	Average/Mean	St. Dev	Pass/Fail	ANSI/AAMI PB 70 Classification Levels
Base Material	cm of H ₂ O	5	726	145.2	17.162	Pass	1, 2, 3
Sleeve seams	cm of H ₂ O	5	669	133.8	35.027	Pass	1, 2, 3

Table 1 - Classification of barrier performance of surgical gown, isolation gowns, other protective apparel, surgical drapes, and drape accessories

Level	Test	Result	AQL requirement (Alpha=.05)	RQL requirement (Beta=0.10)
1	AATCC 42	≤ 4.5 g	4%	20%
2	AATCC 42	≤ 1.0 g	4%	20%
	AATCC 127	≥ 20 cm	4%	
3	AATCC 42	≤ 1.0 g	4%	20%
	AATCC 127	≥ 50 cm	4%	
4	ASTM F1671 (surgical gowns, isolation, gowns and other protective apparel)	Pass	4%	20%
	ASTM F1670 (surgical drapes and drape accessories)	Pass	4%	20%

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Item 5: Results for testing according to 16 CFR 1610 Flammability of Clothing Textiles are below

Preliminary Characteristics			Preliminary Characteristics After Refurbishment (One Dry Cleaning/Laundering) Per AATCC 124		
Length	Burn Characteristics	Time (s)	Length	Burn Characteristics	Time (s)
1	BB	4.5	1	Exempt Under 1610.35(2)	-
2	BB	5.3	2	Exempt Under 1610.35(2)	-
Width	Burn Characteristics	Time (s)	Width	Burn Characteristics	Time (s)
1	IBE	-	1	Exempt Under 1610.35(2)	-
2	IBE	-	2	Exempt Under 1610.35(2)	-

Type of Fabric Surface: ☒ Plain ☐ Raised ☒ Face ☐ Back

Final Test			Final Test After Refurbishment (One Dry Cleaning/Laundering) Per AATCC 124		
Test Burn Direction: Length			Test Burn Direction: NA		
Length	Burn characteristics	Time (s)		Burn characteristics	Time (s)
1	BB	4.3	1	Exempt Under 1610.35(2)	-
2	BB	4.9	2	Exempt Under 1610.35(2)	-
3	BB	4.4	3	Exempt Under 1610.35(2)	-
4	BB	4.8	4	Exempt Under 1610.35(2)	-
5	BB	5.1	5	Exempt Under 1610.35(2)	-
Average	-	4.7	Average		-
6	BB	4.5	6	Exempt Under 1610.35(2)	-
7	BB	5.7	7	Exempt Under 1610.35(2)	-
8	BB	4.7	8	Exempt Under 1610.35(2)	-
9	BB	5.1	9	Exempt Under 1610.35(2)	-
10	BB	5.6	10	Exempt Under 1610.35(2)	-
Average	-	4.9	Average		-

DNI= Did Not Ignite, BB= Base Burn, IBE= Ignited but extinguished

Classification: ☒ **Class 1, Normal Flammability**

*** END OF REPORT ***

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