This order is subject to the attached warranty and liability waiver

TEST REQUEST FORM

Submit Samples to:
Manufacturing **S**olutions **C**enter Test Lab
301 Conover Station SE
Conover NC 28613

Shane Lynch, Testing Lab Manager
Phone: 828-327-7000 Ext.4146
slynch@manufacturingsolutionscenter.org

Please fill out items in BLUE and include a copy of this form in with shipment

INVOICING INFORMATION:

Visit our website for Frequently Asked Questions - www.manufacturingsolutionscenter.org

Is this the first time you've tested with us? "X" here → ☐

Company Name _____
Testing Contact _____
Testing Contact Phone # _____
PO # if applicable _____

Billing Contact _____
Billing Phone # _____
Billing Email _____
Billing Address _____
Billing Address _____

**Please note: Invoice will come from CVCC (Catawba Valley Community College) Please make checks payable to "CVCC".

TEST RESULT DISTRIBUTION:*

Name _____ **Email** _____
Name _____ **Email** _____
Name _____ **Email** _____
Name _____ **Email** _____

Test results will ONLY be sent to those emails listed here

EXPRESS TESTING (IF APPLICABLE)

"X" for Express
☐ **Express Testing:**

*If testing permits, some test methods can be performed in 2 business days or less for double the cost.
*Certain Antimicrobial Testing can be performed in 5 business days or less for double the cost.

RETURN TESTED SAMPLES (IF APPLICABLE)

"X" for Return samples

Please note: Testing methods are destructive to fabrics. Only what is left after testing is complete will be returned.

☐ **Return Tested Samples** ***A handling fee of $10.00 will be added to this invoice for all returned samples. Shipping fees apply.***

- ☐ Customer Will Pick Up within 2 weeks of completion - samples not picked up will be destroyed after 6 months
- ☐ Add shipping and handling fee to this invoice
- ☐ I have provided my shipper, account # and zip code below OR I have enclosed my own shipping label

Carrier & Shipping Speed _____
Account # _____
Billing Account Zip Code _____

Shipping Address if different from billing address _____

Recycled and Sustainable Material?

☐ The MSC is a member of the NC Textile Innovation and Sustainability Engine (NCTISE), a NSF funded program to promote a circular textile economy. We are tracking the number of tests we conduct on recycled and sustainable materials, so please check the box if your materials fall under one of these classifications. **Your company and testing information will always be confidential as we will only report the summarized number of tests we conduct throughout the year.** To learn more about NCTISE, visit www.nctise.org .

SAMPLE IDENTIFICATION

Sample Style Number(s) _____
Sock Size or Garment Size (if applicable) _____
Sample Color(s) _____
Sample Description(s) _____
Special Instructions _____
Fiber Content _____

Not supplying enough samples/yardage will increase testing turnaround time. *Please indicate face & selvage on fabric if applicable*

SAMPLES REQUIRING HOME LAUNDERING - INSTRUCTIONS

WASH:
- ☐ Top Load Machine
- ☐ Delicate Wash
- ☐ Hand Wash
- ☐ Front Load Machine

Temp:
- ☐ Cold (80˚F)
- ☐ Warm (105˚F)
- ☐ Hot (120˚F)
- ☐ Very Hot (140˚F)

Detergent:
- ☐ AATCC Powder
- ☐ Tide Original Powder
- ☐ Liquid AATCC
- ☐ Liquid Tide Original

DRY:
- ☐ Tumble → ☐ High / ☐ Medium / ☐ Low/Delicate
- ☐ Line/Drip
- ☐ Lay Flat

Date Received _____ scanned? ☐ Test Number _____

Date Completed _____ Lab Tech Signature _____

Unless otherwise specified, the latest publication of a test method is run. Test methods with older publication dates can be run if requested.

Test Description		Testing Method		Amount of Fabric /Garments Needed	Price	# of Tests	Total
Testing set up fee for each package received (NOT each style tested)		N/A		N/A	$10.00	1	*$10.00*
PPE Testing:							
Water Resistance: Impact Penetration Test	***Accredited ISO/IEC 17025***	AATCC 42	FABRIC	per specimen	$7.25		
Water Resistance: Impact Penetration Test	***Accredited ISO/IEC 17025***	AATCC 42	SEAMS-lengthwise	per specimen	$7.25		
Water Resistance: Impact Penetration Test	***Accredited ISO/IEC 17025***	AATCC 42	TIES	per specimen	$7.25		
Water Resistance: Hydrostatic Pressure Test	***Accredited ISO/IEC 17025***	AATCC 127	FABRIC	per specimen	$12.00		
Water Resistance: Hydrostatic Pressure Test	***Accredited ISO/IEC 17025***	AATCC 127	SEAMS-lengthwise	per specimen	$12.00		
Water Resistance: Hydrostatic Pressure Test	***Accredited ISO/IEC 17025***	AATCC 127	TIES	per specimen	$12.00		
Resistance to Penetration of Chemical Challenge Option C	***Accredited ISO/IEC 17025***	ASTM F903-18		1/2 yard (3 specimens)	$90.50		
Protective Clothing to Penetration of Synthetic Blood	***Accredited ISO/IEC 17025***	ASTM F1670/F1670M:2017		1/2 yard (3 specimens)	$90.50		
Protective Clothing to Penetration of Synthetic Blood	***Accredited ISO/IEC 17025***	ASTM F1670/F1670M-ANSI/AAMI PB70:2012		per specimen	$30.00		
Seam Break Strength (Tested in one direction; seam formed by customer)	***Accredited ISO/IEC 17025***	ASTM D 1683		1 yard	$36.25		
Face Mask Testing:							
Resistance of Medical Face Masks to Penetration by Synthetic Blood	at 8psi	ASTM F1862-2017		4 masks per pressure	$78.75		
Resistance of Medical Face Masks to Penetration by Synthetic Blood	at 10.5psi	ASTM F1862-2017		4 masks per pressure	$78.75		
Resistance of Medical Face Masks to Penetration by Synthetic Blood	at 12.5psi	ASTM F1862-2017		4 masks per pressure	$78.75		
Particle Filtration Testing (PFE) - Flat Mask or Fabric**	TSI Tester using NaCl Solution	Precursor for NIOSH test testing: TEB-APR-STP-0059		21 masks	$175.00		
Particle Filtration Testing (PFE) - Using 3D MSC Mask Box**	TSI Tester using NaCl Solution	Precursor for NIOSH testing: TEB-APR-STP-0059		21 masks	$300.00		
***Additional Fee if the result of the initial filter load tests determine them to be Type 3 or 4*					$100.00		
Method for Determination of Breathability (Differential Pressure Testing)		BS EN 14683-2019		5 masks	$30.00		
Barrier Face Coverings - Standard Specification - Flat Mask or Fabric		ASTM F3502		10 masks min.	$125.00		
Barrier Face Coverings - Standard Specification - Using 3D MSC Mask Box		ASTM F3502		10 masks min.	$210.00		
Air Permeability - US Standard (38 cm^2 sample head; 125 Pa; cfm)		AATCC M14 - ASTM D737		5 masks min.	$24.00		
Fiber Analysis, Identification & Construction of Fabric & Yarn Cones:		**Testing Method**		**Amount Needed**	**Price**	**# of Test**	**Total**
Fiber Content of a Yarn or Fabric in %		AATCC 20 & 20A		1 cone or 1/2 yard	$48.50		
Fiber Content of a Sock or Pantyhose in %		AATCC 20 & 20A		2 Socks	$84.50		
Fiber Content of a Sock or Pantyhose in % (high pattern)		AATCC 20 & 20A		2 Socks	$120.75		
Fiber Content of a Yarn or Fabric in %		ASTM D629		1 cone or 1/2 yard	$48.50		
Fiber Content of a Sock or Pantyhose in %		ASTM D629		1 cone or 1/2 yard	$84.50		
Fiber Content of a Yarn or Fabric in %		CAN/CGSB-4.2 No. 14-2005		1 cone or 1/2 yard	$48.50		
Fiber Content of a Sock or Pantyhose in %		CAN/CGSB-4.2 No. 14-2005		1 cone or 1/2 yard	$84.50		
Fiber Content/Yarn Count/Construction for Entire Sock (approx. 8-12 yarn counts) ($138.00+$120.75)		ASTM D1059 & D2260		2 Socks	$258.75		
Specialty Fiber Microscopy/Cross Section $60.50/hr.		AATCC 20		1 cone	$60.50		
Yarn Count/Denier Count of Yarn in Fabric - $17.25 per yarn		ASTM D1059 & D2260		1 yard	$17.25		
Filament Count per Yarn Identified		ASTM D1059 & D2260		40" of Yarn	$23.00		
Breaking Load (Strength) of Yarn by the Skein Method (120 yard reeling)		ASTM D1578		1 cone	$13.25		
Twist in Yarns by Direct Counting or Untwist/Retwist Method (Ply & Single)		ASTM D1423		1 Cone or 1 yard	$23.00		
Extractable Matter in Textiles: OPU%(Oil Pick Up%)		MSC-107		1 cone	$18.00		
Shrinkage of Yarns in Boiling Water		ASTM D2259		1 cone	$46.00		
Shrinkage of Yarns in Dry Heat		ASTM D2259		1 cone	$46.00		
Staple Length - Per Measurement		ASTM D519		1 cone	$30.00		
Coefficient of Friction - Yarn to Solid Material		ASTM D3108		1 cone	$13.25		
Spinning Type (OE, Ringspun, etc.)		ASTM D3888		1 cone	$13.25		

Melting Point	ASTM D276-2012	1 cone	$13.25		
Picks Per Inch - Thread Count	ASTM D3775	1/4 full width	$34.50		
Determination of Number of Threads Per Unit Length - Woven Fabrics	CAN/CGSB-4.2 No. 6-2013	1/4 full width	$34.50		
Wale and Course Count of Weft Knitted Fabrics	ASTM D8007	1/2 yard	$34.50		
Knitted Fabric Count - Wales and Courses per Centimetre	CAN/CGSB-4.2 No. 7-M88-2001	1/4 full width	$34.50		
Needle Count of a Sock	MSC-102	1 Sock	$18.00		
Course Count of a Sock	MSC-106	1 Sock	$60.50		
Deconstructing Fabric into yarn form so that yarn testing can be performed $60.50 per hour			$60.50		
Defect Analysis/Examination $60.50 per hour			$60.50		

Cost of Antimicrobial tests are based on the standard test methods. Any modification, laundering or special request may increase the final cost and turnaround time.
Untreated controls are not included, they count as an extra test.

Antimicrobial/Antibacterial Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Antibacterial Finishes ***Accredited ISO/IEC 17025***	AATCC 100	20 grams	$300.00		
Antibacterial Parallel Streak ***Accredited ISO/IEC 17025***	AATCC 147	20 grams	$80.00		
Repeated Home Laundering (automated washer)-AATCC Liquid Detergent w/o Brightener	AATCC 150 *Automated washer*	20 grams	$5.00		
Antibacterial Finishes: Natick Clarification for Testing for AATCC 100	Natick Spec	20 grams	$750.00		
Repeated Laundering Procedure (Wash/Dry Cycles in a dedicated washer/dryer pair)	*Dedicated washer/dryer pair*	20 grams	$5.00		
Antimicrobial Activity ***Accredited ISO/IEC 17025***	ASTM E2149	20 grams	$255.00		
Simulated Home Laundering Antibacterial Agents	ASTM E3162	20 grams	$18.00		
Additional Shake Time - Above 1 hour (specify time to shake $5/hr.) for ASTM E2149		20 grams	$5.00		
Antimircrobial Performance in/on Polymeric Solids against Staining by *Streptomyces species*	ASTM E4128	20 grams	$150.00		
Antibacterial Activity and Efficacy on Textile Products	JIS L 1902:2015	20 grams	$400.00		
Determination of Antibacterial Activity of Antibacterial Finished Products – Textiles	ISO 20743:2013	20 grams	$400.00		
Determining the Activity of Incorporated Antimicrobial Agents in Polymeric of Hydrophobic Materials	ASTM E2180	contact for instructions	$425.00		
Antibacterial Activity Assessment of Textile Materials: Agar Plate Method	AATCC90	20 grams	$95.00		
Antimicrobial Activity Assessment of New Carpets, Pt I: Qualitative : Single Streak Method	AATCC174, Pt I	10" * 10"	$80.00		
Antimicrobial Activity Assessment of New Carpets, Pt II: Quantitative	AATCC174, Pt II	10" * 10"	$400.00		
Quantitative Evaluation of the Antibacterial Properties of Porous Antibacterial Treated Articles	ASTM E3160	20 grams	$350.00		
Special/Other Antimicrobial _____					

Upholstery Testing	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Wyzenbeek Abrasion — Back the Samples with Foam? Yes	ASTM D4157; AHFA JIFS&G Ch. 1 or ASTM D4157 - ACT	1 yard full width	$84.50		
• 15,000 double rubs $84.50 — Wire Screen or Cotton Duck? Wire Screen			$102.50 X		
• 30,000 double rubs $102.50 — INPUT# of double rubs here: 30,000			$16.00 0		
• every 5000 double rubs past 30,000 is $16.00 — # over 30,000: 0			$0.00		
Abrasion Resistance - Martindale Abrasion General Upholstery to 20,000 cycles (movements)	ASTM D4966 - ACT	1/2 yard	$60.00		
Abrasion Resistance - Martindale Abrasion Heavy Duty to 40,000 cycles (movements)	ASTM D4966 - ACT	1/2 yard	$96.50		
Pilling Resistance - Brush Pilling Tester	ASTM D3511	1/2 yard	$42.25		
Pilling Resistance - Fabrics Less Than 3mm (Martindale Tester) **ORIGINAL STATE** (1,000 movements)	ASTM D4970/D4970M - ACT	1 yard	$24.00		
Seam Slippage - Upholstery (Both Fabric Directions)	ASTM D4034 - ACT	1 yard	$72.50		
Seam Slippage - Drapery (Both Fabric Directions)	ASTM D434-2004/ASTM D3597 - ACT	1 yard	$72.50		
Seam Break Strength and Seam Slippage-Failure in Sewn Seams	ASTM D1683; AHFA JIFS&G Ch.21	1 yard	$72.50		
Break Strength and Elongation of Fabrics - Grab Test ***Accredited ISO/IEC 17025***	ASTM D5034; AHFA JIFS&G Ch. 26	1 yard full width	$42.25		
Break Strength & Elongation - Woven & Knit Upholstery ***Accredited ISO/IEC 17025***	ASTM D5034 - ACT	1 yard	$42.25		
Break Strength & Elongation - Woven/Knit Wrapped Panels & Uph Walls ***Accredited ISO/IEC 17025***	ASTM D5034 - ACT	1 yard	$42.25		
Tear Strength of Fabrics - Tongue Tear (Single Rip)	ASTM D2261; AHFA JIFS&G Ch. 25	1 yard	$42.25		
Tear Strength of Fabrics - Trapezoid Procedure ***Accredited ISO/IEC 17025***	ASTM D5587-08; AHFA JIFS&G Ch. 25	1 yard	$42.25		
Elongation - Woven Upholstery Fabric	AHFA JIFS&G Ch. 10	1 yard full width	$29.25		
Colorfastness to Crocking	AATCC 8; AHFA JIFS&G Ch. 5	1 yard full width	$14.50		
Wet & Dry Crocking - ACT guidelines for Upholstery, Wallcoverings or Drapery	AATCC 8 - ACT	12" x 12"	$14.50		

Colorfastness to Water	AATCC 107; AHFA JIFS&G Ch. 4	12" x 12"	$14.50		
Colorfastness to Solvent	ASTM D3597-6.7; AHFA JIFS&G Ch. 4	12" x 12"	$20.50		
Colorfastness to Light - Option E **AFU hours to expose:** _____ $3.00 pr hour	AATCC 16; AHFA JIFS&G Ch. 6	12" x 12"	$3.00		
Colorfastness to Light-Opt 3 ACT - Upholstery AFU hours expose: 40 $3.00 pr hour	AATCC 16.3 - ACT	12" x 12"	$120.00		
Colorfastness to Light-Opt 3 ACT - Wall Coverings AFU hours expose: 40 $3.00 pr hour	AATCC 16.3 - ACT	12" x 12"	$120.00		
Colorfastness to Light-Opt 3 ACT - Drapery AFU hours expose: 60 $3.00 pr hour	AATCC 16.3 - ACT	12" x 12"	$180.00		
Dimensional Stability To Water	AHFA JIFS&G Ch. 9	1 yard full width	$14.50		
Picks Per Inch (Yarn Count)	ASTM D3775; AHFA JIFS&G Ch. 15	1/4 full width	$24.00		
Determination of Number of Threads Per Unit Length - Woven Fabrics	CAN/CGSB-4.2 No. 6-2013	1/4 full width	$24.00		
Assessing Resistance to Liquid Cleaners, Sanitizers and Disinfectants - Woven & Knit Fabrics	ACT Test Method 1 - 2020; Part 1	1 yard	$42.25		
Assessing Resistance to Liquid Cleaners, Sanitizers and Disinfectants - Coated Fabrics	ACT Test Method 1 - 2020; Part 2	1 yard	$42.25		
Hydrolysis Resistance (Polyurethanes only) - Accelerated Aging	ISO 1419 Method C - ACT	1 yard	$42.25		
Colorfastness Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Colorfastness to Chlorine Bleach	AATCC/ASTM TS-001	1	$14.50		
Colorfastness to Chlorine Bleach	AATCC 61 5A	1	$21.75		
Colorfastness to Sodium Hypochlorite Bleach in Home Laundering	AATCC 188	1	$54.50		
Colorfastness to Crocking - Wet and Dry	AATCC 8	1	$14.50		
Colour fastness to Crocking/Rubbing	ISO 105-X12:2001	1	$14.50		
Colorfastness to Crocking	CAN/CGSB 4.2 No. 22-2004	1	$14.50		
Colorfastness to Laundering - Accelerated **Option: 1A**	AATCC 61 Option: 1A	1	$14.50		
Colorfastness to Laundering - Accelerated **Option: 1B**	AATCC 61 Option: 1B	1	$14.50		
Colorfastness to Laundering - Accelerated **Option: 2A**	AATCC 61 Option: 2A	1	$14.50		
Colorfastness to Laundering - Accelerated **Option: 3A**	AATCC 61 Option: 3A	1	$14.50		
Colorfastness to Laundering - Accelerated **Option: 4A** with sodium hypochlorite	AATCC 61 Option: 4A	1	$21.75		
Colorfastness to Laundering - Accelerated **Option: 5A** with sodium hypochlorite	AATCC 61 Option: 5A	1	$21.75		
Colour fastness to Laundering - Accelerated	ISO 105 C-06:1994	1	$14.50		
Colorfastness to Laundering - Accelerated	CAN/CGSB 4.2 No. 19.1-2004 (#2)	1	$14.50		
Colorfastness After Actual Home Laundering	AATCC/ASTM TS-007	2	$25.00		
Colorfastness to Light: Xenon-Arc - Option 3 or E or 16.3 - $3.00/hr. **Exposure hrs.** _____	AATCC 16 e or 3 or 16.3	1 or >12"x12"	$3.00		
Colour fastness to Artificial Light - Xenon Arc Fading Lamp Test	ISO 105-B02:1994	1	$90.50		
Colorfastness to Artificial Light - Xenon Arc Fading Lamp Test	CAN/CGSB 4.2 18.3-97	1	$90.50		
Colorfastness to Non-Chlorine Bleach	AATCC/ASTM TS-001	1	$14.50		
Colorfastness to Non-Chlorine Bleach (Home Launders 5X)	AATCC 172	1	$44.75		
Colorfastness to Perspiration - Acid Perspiration Solution Only	AATCC 15 Acid Only	6"x6" Swatch (1sock)	$20.50		
Colorfastness to Perspiration - Acid & Alkaline Perspiration Solution	AATCC 15 Acid & Alkaline	6"x6" Swatch (1sock)	$41.00		
Colour fastness to Perspiration	ISO 105-E04:1994	6"x6" Swatch (1sock)	$41.00		
Colorfastness to Perspiration	CAN/CGSB 4.2 No. 23-M90-2004	6"x6" Swatch (1sock)	$41.00		
Colorfastness to Saliva	DIN V 53160-1 2002	1	$19.00		
Colorfastness to Water	AATCC 107	6"x6" Swatch (1sock)	$14.50		
Colour fastness to Water	ISO 105-E01:2010	6"x6" Swatch (1sock)	$14.50		
Colourfastness to Water	CAN/CGSB-4.2 No. 20-M89	6"x6" Swatch (1sock)	$14.50		
Colorfastness to Solvent Spotting: Perchloroethylene	AATCC 157	1	$20.50		
Colorfastness to Solvent - Performance Specification for Woven Upholstery Fabrics	AHFA (AATCC 107; ASTM D3597)	1	$20.50		
Colorfastness to Sea Water	AATCC 106	6"x6" Swatch (1sock)	$14.50		
Colorfastness to Water Spotting	AATCC 104	2	$14.50		
Colorfastness to Perspiration and Light	AATCC 125	2	$70.00		
Colorfastness: Dye Transfer in Storage; Fabric to Fabric - Option I (48 hour room temp test)	AATCC 163 Option I	6"x6" Swatch (1sock)	$24.00		
Colorfastness: Dye Transfer in Storage; Fabric to Fabric - Option II (Accelerated 4 hour oven test)	AATCC 163 Option II	6"x6" Swatch (1sock)	$14.50		
Colorfastness to Actual Dry Cleaning	AATCC 132	6"x6" Swatch (1sock)	$20.00		

Compression (Graduated) Testing: contact: Jodi Geis 828-327-7000 x4115	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
The below testing requires you to supply the testing lab with known wearing circumferences at the ankle/calf/thigh & donning height or machine set up criteria					
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Graduated Compression Hosiery	BS661210:2022-Sect 2 Medical	15 socks or legs	$84.50		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Anti-Embolism Hosiery	BS661210:2022-Sect 3 Anti-embolism	15 socks or legs	$84.50		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Graduated Support Hosiery	BS661210:2022-Sect 4 Non-Medical	4 socks	$42.25		
The below testing requires you to supply the testing lab with the NAHM Sock Size					
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - NAHM Profile Plate Size 11.0	BS661210:2022-Sect 4/MSC-117	4 socks	$42.25		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - NAHM Profile Plate Size 13.0	BS661210:2022-Sect 4/MSC-117	4 socks	$42.25		
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - NAHM Profile Plate Size 15.0	BS661210:2022-Sect 4/MSC-117	4 socks	$42.25		
The below testing requires you to supply the testing lab with known wearing circumferences and designated the spot to be tested					
Graduated Hosiery Compression - Bolam HATRA™ Type Tester - Sleeves	BS661210:2022	4 sleeves	$42.25		
Graduated Compression Education on Knitting, Testing, Product Research, Etc.					
Graduated Hosiery Compression Education - Knitting, Testing, Etc.			Email/Call for Info		
Abrasion Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Abrasion Resistance - Fabric (Martindale Tester): Option 1 = hole in knits or Option 1 = 2 ends break in wovens Up to 25,000 movements Run fabric until movements **OR** Run Fabric to end point	ASTM D4966 Option 1	1/2 yard	$60.00		
Movements past 25,000 are $12.00 per each 5,000 movements		1/2 yard	$12.00		
Abrasion Resistance - Fabric (Martindale Tester): Option 2=change in shade/appearance	ASTM D4966 Option 2	1/2 yard	$60.00		
Abrasion Resistance - Fabric (Martindale Tester): Option 3=mass loss as a percentage	ASTM D4966 Option 3	1/2 yard	$60.00		
Abrasion Resistance - Fabric (Martindale Tester) - Specimen Breakdown	ISO 12947-2:2016	1/2 yard	$60.00		
Movements past 25,000 are $12.00 per each 5,000 movements		1/2 yard	$12.00		
Abrasion Resistance - Fabric (Martindale Tester) - Mass Loss	ISO 12947-3:1998	1/2 yard	$60.00		
Movements past 25,000 are $12.00 per each 5,000 movements		1/2 yard	$12.00		
Abrasion Resistance-Socks Straight Line Abrasion up to 10,000 cycles - Must have NAHM sock size **Circle Which Area to Test: Sole of Foot, Ball of Foot, Heel** Run socks until cycles **OR** Run socks until a hole	THA Martindale Abrasion Method	3 Socks	$60.00		
Cycles past 10,000 are $6.00 each additional 1,000 cycles			$6.00		
Abrasion Resistance Determination	BS3424-24: 1990 Method 27A	1/2 yard	$58.50		
Pill and Snag Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Pilling Resistance - Fabrics Thicker Than 3mm (Random Tumble Pill Tester) at 30 minutes	ASTM D3512/D3512M	3 or 1/2 yard	$24.00		
Resistance to Pilling - Random Tumble Pilling Tester KNIT FABRIC at 5, 10, 20 and 30 minutes	CAN/CGSB-4.2 No. 51.2-M87 Knit	3 or 1/2 yard	$30.00		
Resistance to Pilling - Random Tumble Pilling Tester WOVEN FABRIC at 30 and 60 minutes	CAN/CGSB-4.2 No. 51.2-M87 Woven	3 or 1/2 yard	$30.00		
Adding 90 and 120 minutes (addition to 30 and 60 minutes)	CAN/CGSB-4.2 No. 51.2-M87		$12.00		
Propensity to Pilling, Fuzzing or Matting - Random Tumble Pill Method	ISO 12945-3:2020(E)	3 or 1/2 yard	$30.00		
Pilling Resistance - Fabrics Less Than 3mm (Martindale Tester) **ORIGINAL STATE**	ASTM D4970/D4970M	1 yard	$24.00		
Pilling Resistance - Fabrics Less Than 3mm (Martindale Tester) **AFTER 1X LAUNDERING** (provide laundering instructions on Page 1)	ASTM D4970/D4970M	1/2 yard	$29.00		
Pilling Resistance - Martindale Tester 7000 Rubs	ISO 12945-2:2020	1 yard	$35.00		
Pilling Resistance: ICI Pill Box Method 2 hour run time	ISO 12945-1: 2020	1/2 yard	$51.75		
Pilling Resistance: ICI Pill Box Method 4 hour run time	ISO 12945-1: 2020	1/2 yard	$74.75		
Pilling Resistance: Rotating Box Method 10 hour run time	CAN/CGSB-4.2 No.51.1-95	1/2 yard	$143.75		
Brush Pilling: Pilling Resistance	ASTM D3511	1/2 yard	$42.25		
Pilling After Repeated Home Laundering - Appearance of Pill and Fuzz - After 1X Home Laundering		2 garments/ ½ yard	$15.00		
Pilling After Repeated Home Laundering - Appearance of Pill and Fuzz - After 3X Home Laundering		2 garments/ ½ yard	$25.00		
Pilling After Repeated Home Laundering - Appearance of Pill and Fuzz - After 5X Home Laundering		2 garments/ ½ yard	$35.00		
Snagging - Mace Snagging using an ABC Tester	ASTM D3939/D3939M	1 yard	$24.00		
Snagging - SnagPod Tester	BS 8479-2008	1 yard	$54.50		
Snag Resistance - Penney's Snag Tester	VF Workwear Work Instruction: WW-30	1/2 yard	$21.75		
Stretch Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**

Stretch Properties of Textile Fabrics - CRE Method	ASTM D6614	1 yard	$42.25		
Stretch Properties of Knitted Fabrics Having Low Power - Elastic Recovery	ASTM D2594	1	$48.50		
Stretch Properties - Tension and Elongation of Elastic Fabrics	ASTM D4964	1	$48.50		
Stretch Properties of Fabrics Woven from Stretch Yarns	ASTM D3107	1	$60.50		
Tensile, Burst, Tear, Seam Strength and Peel Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Burst Strength - CRE Method (for socks, hosiery, fabric)	ASTM D6797	5	$18.00		
Burst Strength - Inflatable Diaphragm - Mullen Burst Tester	ASTM D3786/D3786M	5	$18.00		
Burst Strength - Diaphragm Pressure Test - Mullen Burst Tester	CAN/CGSB-4.2 No. 11.1-94 2013	5	$18.00		
Break Strength & Elongation of Fabrics - Grab Test ***Accredited ISO/IEC 17025***	ASTM D5034	1 yard	$42.25		
Break Strength & Elongation of Fabrics - Grab Test	ISO 13934-2-2014	1 yard	$42.25		
Breaking Strength of Fabrics - Grab Method - Constant-Time-to-Break Principle	CAN/CGSB-4.2 No. 9.2-M90-2013	1 yard	$42.25		
Break Strength - Grab Test of Coated Fabrics	ASTM D751 Sect 12-15; Proc A-2011	1 yard	$42.25		
Break Strength & Elongation of Fabrics - Strip Method	ASTM D5035	1 yard	$42.25		
Break Strength & Elongation of Fabrics - Strip Method	ISO 13934-1:2013	1 yard	$42.25		
Tearing Strength - Single Rip Method	CAN/CGSB-4.2 No. 12.1-M90-2004	1 yard	$42.25		
Breaking Force & Elongation of Nonwoven Materials (Strip Method)	WSP 110.4 2009	1 yard	$42.25		
Grab Breaking Load & Elongation of Geotextiles	ASTM D4632	1 yard	$42.25		
Tear Strength of Fabrics - Tongue Tear (Single Rip)	ASTM D2261	1 yard	$42.25		
Tearing Strength of Fabrics by Falling-Pendulum (Elmendorf-Type)	ASTM D1424	1 yard	$75.00		
Tear Strength of Non-woven Fabrics - Tongue Tear (Single Rip)	ASTM D5735	1 yard	$42.25		
Tearing Strength of Nonwoven Fabrics by the Tongue Tear (Single Rip) Procedure (CRE)	WSP 100.3 2009	1 yard	$42.25		
Tear Strength of Fabrics - Trapezoid Procedure ***Accredited ISO/IEC 17025***	ASTM D5587	1 yard	$42.25		
Trapezoid Tear Strength of Geotextiles	ASTM D4533	1 yard	$42.25		
Tear Strength of Non-Woven Fabrics-Trapezoid Procedure ***Accredited ISO/IEC 17025***	ASTM D5733-1999	1 yard	$42.25		
Tear Strength of Nonwoven Fabrics by the Trapezoid Procedure	WSP 100.2 2009	1 yard	$42.25		
Seam Break Strength and Seam Slippage-Failure in Sewn Seams	ASTM D 1683	1 yard	$72.50		
Seam Slippage - Woven Fabrics (testing both directions)	ASTM D434-1994	1 yard	$72.50		
Seam Slippage - Woven Fabrics (testing both directions)	ISO 13936-1: 2004	1 yard	$72.50		
Seam Slippage - Upholstery	ASTM D4034	1 yard	$72.50		
Pocket Reinforcement	ASTM D7506/D7506M	3 garments	$42.25		
Breaking Strength and Elongation of Textile Webbing, Tape and Braided Material	ASTM D6775	1 yard	$42.25		
Strength and Elongation, Breaking (Webbing, Tape, and Braided Items)	Federal Test 191A method 4108	1 yard	$42.25		
Strength and Elongation Breaking of Cordage: Non-Spliced Specimen Method	PIA-Test Method-6016	1 yard	$42.25		
Performance of Bonded, Fused, and Laminated Apparel Fabrics - Bond Strength Option Only	ASTM D2724	1/2 yard	$42.25		
Bond Strength of Bonded and Laminated Fabrics	AATCC 136	1/2 yard	$42.25		
Break Strength & Elongation of Fabrics - as referenced in ASTM D4830 Roofing & Waterproofing	ASTM D4830 - ASTM D5035	1 yard	$42.25		
Tear Strength of Non-Woven Fabrics-as referenced in ASTM D4830 Roofing & Waterproofing	ASTM D4830 - ASTM D5733	1 yard	$42.25		
Other Durability Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Applied Decorations	16 CFR 1500.51-52	3	$15.75		
Snap Testing - Holding Strength of Prong Ring Attached Snap Fasteners	ASTM D7142	3 garments	$29.25		
Flammability Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Flammability of Wearing Apparel - Test face of fabric ***Accredited CPSIA / ISO/IEC 17025***	16 CFR 1610/ASTM D1230	12 garments/1 yd	$100.00		
Flammability of Wearing Apparel - Test face & back of fabric ***Accredited CPSIA / ISO/IEC 17025***	16 CFR 1610/ASTM D1230	12 garments/1 yd	$160.00		
Flammability Apparel Exemption - Fabric Weight ***Accredited CPSIA / ISO/IEC 17025***	16 CFR 1610 (ASTM D3776)	3 garments / 1' x 1'	$35.00		
Flammability Apparel Exemption - Fiber Content ***Accredited CPSIA / ISO/IEC 17025***	16 CFR 1610 (AATCC 20 & 20A)	3 garments / 1' x 1'	$50.00		
Flame Resistance - 45° Angle Test - One Second Flame Impingement	CAN/CGSB-4.2 No. 27.5-2008	12 garments/1 yd	$85.00		
Vertical Flammability	Federal Test 191A method 5903	10 garments/1 yd	$100.00		
Vertical Flammability	ASTM D6413-07 (2011)	10 garments/1 yd	$100.00		

Vertical Flammability - Flame Impingement	ASTM F1358-00 (2005)	10 garments/1 yd	$100.00		
Horizontal Burning - Flammability of Interior Materials	FMVSS 302	10 garments/1 yd	$65.00		
Horizontal Burning - Motor Vehicles	ASTM D5132	10 garments/1 yd	$65.00		
NFPA 701 - Fire Tests for Flame Propagation of Textiles and Films	NFPA 701-2004 TM1	10 garments/1 yd	$100.00		
California Technical Bulletin 117-2013	CA TB117-2013	1/2 yard	$100.00		
Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture-Cover Fabric Test	NFPA 260-2013	1/2 yard	$100.00		
UFAC -Fabric Classification	UFAC-1990	1/2 yard	$100.00		
Formaldehyde, Phenols, pH & Alkali Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Formaldehyde Detection	JIS 112 L 1041	12" x 12"	$42.25		
Formaldehyde Detection (Spot Test Method)	MSC-105 (Spot Test Method)	12" x 12"	$36.25		
Formaldehyde Detection - Jar Method	AATCC 112	12" x 12"	$42.25		
Formaldehyde Detection - Free and Hydrolyzed Determination of: Water Extraction Method	AATCC 206	12" x 12"	$42.25		
Formaldehyde - Part 1: Free and Hydrolyzed Formaldehyde (Water Extraction Method) - Textile	ISO 14184-1 Part 1	12" x 12"	$42.25		
Formaldehyde - Part 2: Released Formaldehyde (Vapour Absorption Method) - Textile	ISO 14184-1 Part 2	12" x 12"	$42.25		
pH Level of Water-Extract from Wet Processed Textiles	AATCC 81	12" x 12"	$18.00		
pH of aqueous extract	BS EN ISO 3071:2020	12" x 12"	$25.00		
Phenolic Yellowing (propensity to yellow)	ISO 105-X18: 2007	12" x 12"	$24.00		
Phenol Levels (Textiles)	MSC Phenol Level Method	12" x 12"	$24.00		
Phenol Levels (Plastics)	EPA Method 420.1:1978 - Modified	12" x 12"	$30.00		
Alkalinity in Wet Processed Textiles	AATCC 144	12" x 12"	$24.00		
Metal/Lead Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Metal/Lead Screening using XRF Gun	ASTM F2853-10	Call for details	$42.25		
Moisture Management Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Absorbency - to be performed after 1 home laundering	AATCC/ASTM TS-018	2	$18.00		
Absorbency - to be performed after 1 home laundering - Option A: Burette Stand Method	AATCC 79: Option A	2	$18.00		
Absorbency - to be performed after 1 home laundering - Option B: Medicine Dropper Method	AATCC 79: Option B	2	$18.00		
Absorption of Nonwovens - Liquid Absorptive Capacity	ISO 9073-6: 2000 Part 6 Section 5	2	$18.00		
Absorption of Nonwovens - Liquid wicking rate	ISO 9073-6: 2000 Part 6 Section 6	2	$32.00		
Drying Rate - to be performed after 1 home laundering	HTC Scale Method	2	$32.00		
Drying Rate - Heated Plate Method	AATCC 201	1/2 yard	$48.50		
Drying Rate - Air Flow Method	AATCC 200	1/2 yard	$90.50		
Liquid Moisture Management Properties of Textile Fabrics - MMT Method	AATCC-195	5	$48.50		
Vertical Wicking Rate - to a specified time (old option A); **ORIGINAL STATE**	AATCC 197 (Option A) ORIGINAL	3	$36.25		
Vertical Wicking Rate - to a specified time (old option A); **AFTER LAUNDERING** _____ **CYCLES** provide laundering instructions on Page 1 - **Added charges for laundering**	AATCC 197 (Option A) LAUNDERED	3	$36.25		
Vertical Wicking Rate- to specified distance (Old Option B); **ORIGINAL STATE**	AATCC 213 (Option B) ORIGINAL	3	$36.25		
Vertical Wicking Rate- to specified distance (Old Option B); **AFTER LAUNDERING** _____ **CYCLES** provide laundering instructions on Page 1 - **Added charges for laundering**	AATCC 213 (Option B) LAUNDERED	3	$36.25		
Vertical Wicking - Distance Over Time; to be performed after 1 home laundering	TPACC Method	3	$36.25		
Vertical Wicking - Time Over Distance; to be performed after 1 home laundering	AATCC/ASTM TS-017	3	$36.25		
Horizontal Wicking of Textiles	AATCC 198	1/2 yard	$36.25		
Water Repellency: Spray Test	AATCC 22	1/2 yard	$18.00		
Determination of Resistance to Surface Wetting (Spray Test)	ISO 4920:2012	1/2 yard	$18.00		
Water Resistance: Impact Penetration Test ***Accredited ISO/IEC 17025***	AATCC 42	1/2 yard	$21.75		
Surface Water Absorption of Terry Fabrics (Water Flow)	ASTM D4772	1 yard	$46.50		
Aqueous Liquid Repellency: Water/Alcohol Solution Resistance Test	AATCC 193	2	$18.00		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Desiccant Method at 23˚C Which side of fabric to Desiccant? Face "X" [ ] Back "X" [ ]	ASTM E96-2024 Modified: Procd A *24 hour run time*	3 garments / 3' x 3'	$173.25		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Water Method at 23˚C Which side of fabric to Water? Face "X" [ ] Back "X" [ ]	ASTM E96-2024 Modified: Procd B *24 hour run time*	3 garments / 3' x 3'	$173.25		

Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Inverted Cup Method BW Which side of fabric to Water? Face "X" [ ] Back "X" [ ]	ASTM E96-2024 Modified: Procd BW *24 hour run time*	3 garments / 3' x 3'	$173.25		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Desiccant Method at 32.2˚C Which side of fabric to Desiccant? Face "X" [ ] Back "X" [ ]	ASTM E96-2024 Modified: Procd C *24 hour run time*	3 garments / 3' x 3'	$173.25		
Moisture Vapor Transmission - MVTR (Water Vapor Transmission) Water Method at 32.2˚C Which side of fabric to Water? Face "X" [ ] Back "X" [ ]	ASTM E96-2024 Modified: Procd D *24 hour run time*	3 garments / 3' x 3'	$173.25		
Water Vapor Transmission of Textiles	AATCC 204	3 garments / 3' x 3'	$103.00		
Water Resistance: Hydrostatic Pressure Test ***Accredited ISO/IEC 17025***	AATCC 127	1/2 yard	$36.25		
Water Resistance: Hydrostatic Pressure Using a Restrain Test	AATCC 208	1/2 yard	$36.25		
Water Penetration: Hydrostatic Pressure Test; Determination of Resistance	ISO 811:2018	1/2 yard	$36.25		
Thermal Resistance Using a Sweating Guarded Hot Plate	ASTM F1868-Part A	1 yard	$150.00		
Evaporative Resistance Using a Sweating Guarded Hot Plate	ASTM F1868-Part B	1 yard	$165.00		
Thermal and Water Vapour Resistance Under Steady State Conditions- Sweating Guarded Hot Plate	ISO 11092:2014	1 yard	$165.00		
Thermal and Water Vapour Resistance Under Steady State Conditions- Sweating Guarded Hot Plate	ISO 11092:2014	1 yard	$165.00		
Physical Testing:	**Testing Method**	**Amount Needed**	**Price**	**# of Test**	**Total**
Oil Repellency: Hydrocarbon Resistance Test	AATCC 118	1/4 yard	$18.00		
Oil Repellency: Hydrocarbon Resistance Test	ISO 14419-2010	1/4 yard	$18.00		
Soil Release - Oily	AATCC 130	1 yard/2 garment	$24.00		
Additional Stains for Soil Release Test _____			$6.50		
Evaluating Stain Removal Performance in Home Laundering - up to 6 Stains (excluding blood)	ASTM D4265	2 yards or MSC will provide fabric	$60.50		
Additional Stains for Soil Release Test _____			$6.50		
Float Loop Length and Pattern Yarn Strings in Socks		2 Socks	$18.00		
Appearance After Home Laundering-Color Change, Skew, Pill, Fuzz Additional charge for > 1 wash	AATCC/ASTM TS-008	2 garments/ ½ yard	$24.00		
Appearance of Apparel and Other Textile End Products after Home Laundering	AATCC 143	2 garments/ ½ yard	$36.25		
Air Permeability - US Standard (38 cm^2 sample head; 125 Pa; cfm)	ASTM D737	2 garments/ ½ yard	$24.00		
Air Permeability - British Standard (5 cm^2 sample head, 98 Pa, $cm^3/cm^2/s$)	BS 5636-1990	2 garments/ ½ yard	$24.00		
Air Permeability of Nonwoven Materials	WSP 70.1 2008	½ yard	$24.00		
Air Permeability - US Standard (20 cm^2 sample head; 125 Pa; cfm)	ASTM D737	2 garments/ ½ yard	$24.00		
Air Permeability - Australian Standard (38 cm^2 sample head, 98 Pa, $cm^3/cm^2/s$)	AS 2001.2.34-1990	2 garments/ ½ yard	$24.00		
Air Permeability - International Standard (20 cm^2 sample head; 100 Pa (1mbar); mm/s) (Apparel)	ISO 9237-1995	2 garments/ ½ yard	$24.00		
Air Permeability - International Standard (20 cm^2 sample head; 200 Pa; mm/s) (Industrial Fabrics)	ISO 9237-1995	2 garments/ ½ yard	$24.00		
Care Instruction Confirmation	ASTM D3938	3	$102.75		
Care Instruction Establish	ASTM D3938	7	$157.00		
Fabric Weight - Option C - Small Swatch of Fabric ***Accredited ISO/IEC 17025***	ASTM D3776 - Option C	2 garments/ ½ yard	$18.00		
Fabric Weight - Option B - Full Width Sample ***Accredited ISO/IEC 17025***	ASTM D3776 - Option B	1 yard	$18.00		
Fabric Weight - Option D - Narrow Fabric ***Accredited ISO/IEC 17025***	ASTM D3776 - Option D	2 garments/ ½ yard	$18.00		
Fabric Weight - Option B (modified) - Full SOCK Weight ***Accredited ISO/IEC 17025***	ASTM D3776 - Sock Weight	3 socks	$18.00		
Fabric Weight (Mass Per Unit Area)	ISO 3801:1977 Method 5	2 garments/ ½ yard	$18.00		
Unit Mass of Fabrics	CAN/CGSB-4.2 No. 5.1-M90	2 garments/ ½ yard	$18.00		
Fabric Weight (Mass Per Unit Area) (Nonwovens)	WSP 130.1 2009	2 garments/ ½ yard	$18.00		
Fabric Mass - Coated Fabrics	ASTM D751 Sect 10.2	½ yard	$18.00		
Fabric Width	ASTM D3774	3 yards full width	$18.00		
Determination of Width and Length of Textile Fabrics	CAN/CGSB-4.2 No. 4.1-2008	3 yds full width (min)	$57.50		
Dimensional Change / Stability (Shrinkage) - Fabrics After Home Laundering at 3X	AATCC 135 - 3X	2 yards full width	$35.00		
Dimensional Change / Stability (Shrinkage) - Garments After Home Laundering at 3X	AATCC 150 -3X	3 garments	$35.00		
Dimensional Change / Stability (Shrinkage) - Fabrics After Home Laundering at 5X	AATCC 135 - 5X	2 yards full width	$45.00		
Dimensional Change / Stability (Shrinkage) - Garments After Home Laundering at 5X	AATCC 150 - 5X	3 garments	$45.00		
Dimensional Change / Stability (Shrinkage) -Socks After Home Laundering by Stretch Method	AATCC 135 / Stretch Method	3 socks	$35.00		
Dimensional Change / Stability (Shrinkage) - ISO Method (1X)	ISO 5077:2007	3 garments	$35.00		
Dimensional Change / Stability (Shrinkage) - Canadian Method	CAN/CGSB-4.2 No. 58-2019	3 garments	$35.00		

Dimensional Change / Stability (Shrinkage) - Drycleaning in Perchloroethylene: Machine Method 1X	AATCC 158 - 1X	2 yards full width	$31.50		
Dimensional Change / Stability (Shrinkage) - Drycleaning in Perchloroethylene: Machine Method 3X	AATCC 158 - 3X	2 yards full width	$47.50		
Dimensional Change / Stability (Shrinkage) - Drycleaning in Perchloroethylene: Machine Method 5X	AATCC 158 - 5X	2 yards full width	$52.50		
Linear Dimensional Change	ASTM D1204	½ yard	$52.50		
Fit Properties of Socks - NAHM forms & Stretch information - ORIGINAL STATE	HIFOMACO LCS 4800	3 Socks	$30.00		
Fit Properties of Socks - NAHM forms & Stretch information - AFTER 3 HOME LAUNDERINGS	HIFOMACO LCS 4800	3 Socks	$45.00		
Fit Properties of Socks - NAHM forms ONLY - ORIGINAL STATE	NAHM forms	3 Socks	$15.00		
Fit Properties of Sheers and Tights - THA Volumetric Forms	THA Volumetric Forms	1 Sheer/Tight	$35.00		
Fit Properties of Sheers and Tights - Stretch Information	HIFOMACO HT - 36L	1 Sheer/Tight	$35.00		
Relaxed Layout of Socks/Hosiery	Ruler	3 Socks/Hosiery	$20.00		
Smoothness Appearance of Fabrics After Repeated Home Laundering	AATCC 124	3 garments	$24.00		
Smoothness of Seams in Fabrics After Repeated Home Laundering - Single and Double Seam	AATCC 88B	1 garment	$24.00		
Retention of Creases in Fabrics after Repeated Home Laundering	AATCC 88C	1 garment	$24.00		
Assessing the Appearance of Creases in Fabric After Cleansing	ISO 7769-2009	1 garment	$24.00		
Skewness Change in Fabric and Garment Twist After Home Laundering	AATCC 179	3 garments	$35.00		
Stiffness of Fabrics - Option A: Using the Shirley Stiffness Tester	ASTM D1388 - Option A	½ yard	$47.25		
Fabric Thickness	MSC Method	¼ yard	$25.00		
Testing Lab Technician Hourly Rate $60.50/hr.			$60.50		
Repeated Home Laundering	**Testing Method**	**Price is:**	**Price**	**# of Test**	**Total**
Repeated Home Laundering ($5.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC LP1	Per wash/dry cycle	$5.00		
Repeated Home Laundering ($5.00 per Laundering)-AATCC Powder Detergent WITH Brightener	AATCC LP1		$5.00		
Repeated Home Laundering ($5.00 per Laundering)-AATCC Liquid Detergent w/o Brightener	AATCC LP1		$5.00		
Repeated Home Laundering ($5.00 per Laundering)-Other:_____	AATCC LP1		$5.00		
Repeated Home Laundering at Temps above 120°f ($5.50 per Laundering)	AATCC LP1		$5.50		
Repeated Hand Laundering ($5.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC LP2		$5.00		
Domestic Washing and Drying Procedures for Textile Testing	ISO 6330:2012		$6.00		
Repeated Home Laundering ($5.00 per Laundering)-AATCC Powder Detergent w/o Brightener	AATCC135 (3, IV, A, iii) for FR fabrics		$5.00		
Repeated Industrial Laundering	**Testing Method**	**Price is:**	**Price**	**# of Test**	**Total**
Repeated Industrial Laundering ($14.50 per Laundering)-AATCC Powder Detergent w/o Brightener	ISO 15797-2002	Per wash/dry cycle	$14.50		
Repeated Industrial Laundering ($14.50 per Laundering)-AATCC Liquid Detergent w/o Brightener	ISO 15797-2002		$14.50		
Repeated Industrial Laundering ($14.50 per Laundering)-Other:_____			$14.50		
Weather and Light Stability	**Testing Method** **Fill in ↓**	**Amount Needed**	**Price**	**# of Test**	**Total**
Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials (UVA)	ASTM G154-06 exposure hrs. ____ Option? ____		$3.00		
Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials	ASTM G155-05a exposure hrs. ____ Option? ____		$3.00		
Weather Resistance of Textiles: Xenon Lamp Exposure	AATCC 169 exposure hrs. ____ Option? ____	4 yards or 10 garments	$3.00		
Weather Resistance: UV Light and Moisture Exposure	AATCC 186 exposure hrs. ____ Option? ____	4 yards or 10 garments	$3.00		
Colorfastness to Light: Xenon-Arc - Option 3 or E or 16.3 - $3.00/hr. -	AATCC 16.3 exposure hrs. ____	> 12" x 12" sample	$3.00		
Colorfastness to Light: Outdoor-Option 16.1 (Actual outdoor weathering utilizing a weathering station)	AATCC 16.1 exposure hrs. ____		$3.00		
Xenon-Arc Exposure Plastics Outdoors Cycle 1 - $3.00/hr.	ASTM D2565-99/0 exposure hrs. ____		$3.00		
Geotextile Deterioration-Light, Moisture & Heat using Xenon Arc	ASTM D4355-07 exposure hrs. ____	2 linear yards	$3.00		
Weatherability of Automotive Parts	JIS D 0205 exposure hrs. ____		$3.00		
Rubber Deterioration - Using Artificial Weathering Apparatus (Xenon-Arc)	ASTM D750-12 exposure hrs. ____		$3.00		
Rubber Deterioration - Using Artificial Weathering Apparatus (QUV-UVA)	ASTM D750-12 exposure hrs. ____		$3.00		
Rubber Deterioration - Discoloration from UV & heat Exposure of Light Colored Surfaces	ASTM D1148-07a exposure hrs. ____		$3.00		

Accelerated Weathering Test Conditions and Procedures for Bituminous Materials - Cycle A	ASTM D4798-04 exposure hrs.		$3.00			
Accelerated Exposure of Automotive Interior Trim Components - Flat Array Xenon Arc Apparatus	SAE J2412-04 exposure hrs.		$3.00			
Other:	**Testing Method**				**# of Test**	**Total**
						Total
Shipping/Return Samples to Customer (If Applicable) - Tracking Number & Carrier		**Handling Fee**	$0.00			*$0.00*
Carrier:	**Tracking #:**	**Shipping Cost**	$0.00			
				SUB-TOTAL	0	*$10.00*
				EXPRESS TESTING	0	

Results from testing may include confidential and proprietary information. I agree to keep this information confidential.
I understand that results may be used for research purposes only.
Lab Manager's Signature _____ Date 8/6/2024

We accept major credit cards. Call for details (828-327-7000 x4265)

Total Cost	**$10.00**

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

MANUFACTURING SOLUTIONS CENTER
WARRANTY & LIABILITY WAIVER

The Trustees of Catawba Valley Community College ("CVCC") and Manufacturing Solutions Center ("MSC"), 301 Conover Station SE, Conover, North Carolina 28613, offers MSC testing services with the terms, conditions, and notices as follows:

Terms of Use
MSC's testing services offered to you are conditioned upon your acceptance without modification of the terms, conditions, and notices herein.

Limitation of Liability
In no event shall CVCC or MSC be liable for any direct, indirect, punitive, incidental, special consequential damages whatsoever arising out of or connected with any products or materials tested by MSC, including the use, inability to use, or performance of products or materials.

Limited Warranty
No claims, representations, or warranties, whether express or implied, are made by MSC or CVCC as to the safety, reliability, durability, and/or performance of any tested products. You agree to waive any and all warranties.

Other Statements
CVCC and MSC employees and representatives' oral or other written statements do not constitute warranties and shall not be relied upon by you.

Enforceability
If any part of this Warranty & Liability Waiver is determined to be void, invalid, unenforceable, or illegal, then the invalid or unenforceable provision will be deemed superseded by a valid, enforceable provision that most closely matches the intent of the original provision and the remainder of the provisions shall remain in full force or effect.

Choice of Law
This Warranty & Liability Waiver is governed by the laws of the State of North Carolina.

Modification of Terms and Conditions
MSC reserves the right to change the terms, conditions, and notices under which their services are offered.