

Test Report	No. 28513094	Date: 16th December 2022	Page 1 of 6
--------------------	---------------------	--	--------------------

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description	:	Lense Col: 60105 Light Grey
Customer	:	Gabriel
Colour	:	60105 Light Grey
Product type	:	Upholstery fabric
Fiber content	:	-

Test Performed * * : Selected test(s) as requested by applicant * * *

Sample Receiving Date : 16th November 2022


Testing Period : 16th November 2022 – 16th December 2022

Test Result(s) : For further details, please refer to the following page(s).

Conclusion:

Test Property	Results	Test Property	Results
Abrasion	-	Tensile	-
Pilling	-	Elasticity of Fabrics	-
Colour Fastness to Washing	-	Snagging	-
Colour fastness to Dry Clean	-	Tear	-
Colour fastness to Perspiration	-	Seam Slippage	-
		Colour fastness to Rubbing (wet / dry)	-
Colour fastness to Water	-	Colour fastness to Rubbing (Organic Solvents)	-
Colour Fastness to Water Spotting	-	Colour Fastness to Lights	-
Colour Fastness to Rubbing (Foam Detergent)	-		

Signed for and on behalf of
TÜV Rheinland UK LTD



Digitally signed
by Dathan Stone
Date: 2022.12.16
10:58:21 Z

Dathan Stone
Senior Laboratory Technician



8400

Test result is drawn according to the kind and extent of tests performed.
Without permission of the test centre this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products. This test report represents the test parameters as requested by the customer based on submitted samples only.



Test Report	No. 28513094	Date: 16th December 2022	Page 2 of 6
--------------------	---------------------	--	--------------------

Results:

Abrasion Resistance (BS EN ISO 12947-2:2016/AC:2006 according to BS EN 14465); Martindale Wear & Abrasion Tester; 12 kPa Pressure)			
Result			
	Specimen 1	Specimen 2	Specimen 3
End point reached, three thread breakdown	110,000	110,000	110,000
Overall endpoint	110,000		
Colour Change At 3000 (rubs)	4-5	4-5	4-5
Remarks: Grey Scale Rating is based on the step scale of 1 to 5, where 1 is bad and 5 is good Observation Technique:40 fold magnification			

Pilling Resistance (BS EN ISO 12945-2:2020; Martindale Abrasion & Pilling Tester; Total Load Applied 415g, tested against wool abradent fabric) No cleansing required	
	Average Result
After 2000 Rubs Rating	5 Fuzzing 5 Pilling 5 Matting
After 5000 Rubs Rating	5 Fuzzing 5 Pilling 5 Matting
Remarks: Pilling Rating 5 - No change 4 - Slight surface fuzzing and/or partially formed pills 3 - Moderate surface fuzzing and/or moderate pilling. Pills of varying size and density partially covering the specimen 2 - Distinct fuzzing and/or distinct pilling. Pills of varying size and density covering a large proportion of the specimen surface 1 - Dense surface and/or severe pilling. Pills of varying size and density covering the whole of the specimen surface	



Test Report	No. 28513094	Date: 16 th December 2022	Page 3 of 6
--------------------	--------------	--------------------------------------	-------------

Colour Fastness To Washing (BS EN ISO 105-C06: 2010) Washing Condition: A2S, 40°C With ECE(B) + Sodium Perborate, 10 Steel Balls.	
Sample	Result
Colour Change	4-5
Self-Staining	4-5
Colour Staining	Result
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Colour Fastness To Dry cleaning (BS EN ISO 105-D01: 2010)	
Sample	Result
Colour Change	4-5
Self-Staining	4-5
Colour Staining	Result
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Colour Fastness To Perspiration (BS EN ISO 105-E04: 2013)		
Sample	Result	
	Acid	Alkaline
Colour Change	4-5	4-5
Self-Staining	4-5	4-5
Colour Staining	Result	Result
Acetate	4-5	4-5
Cotton	4-5	4-5
Polyamide	4-5	4-5
Polyester	4-5	4-5
Acrylic	4-5	4-5
Wool	4-5	4-5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good		



Test Report	No. 28513094	Date: 16th December 2022	Page 4 of 6
--------------------	---------------------	--	--------------------

Colour Fastness To Water (BS EN ISO 105-E01: 2013) test specimen in vertical position	
Sample	Result
Colour Change	4-5
Self-Staining	4-5
Colour Staining	Result
Acetate	4-5
Cotton	4-5
Polyamide	4-5
Polyester	4-5
Acrylic	4-5
Wool	4-5

Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good

Colour Fastness To Rubbing (BS EN ISO105-X12:2016); Size of rubbing finger: 16mm diameter			
Sample	Result		
	Warp		Weft
	Dry: 5		Dry: 5
	Wet: 5	% Soak: 100%	Wet: 5 % Soak: 100%

Colour Fastness To Rubbing (Foam Detergent) (BS EN ISO105-X12:2016); Size of rubbing finger: 16mm diameter			
Sample	Result		
	Warp		Weft
	Dry: -		Dry: -
	Wet: 5	% Soak: 100%	Wet: 5 % Soak: 100%

Seam Slippage (BS EN ISO 13936-2:2004)	
Sample	Result
Warp	1.0(mm)
Weft	1.4(mm)

Tearing Strength (BS EN ISO 13937-1:2000; Single Tear)	
Sample	Result
Warp	>64(N)
Weft	>64(N)



Test Report	No. 28513094	Date: 16th December 2022	Page 5 of 6
--------------------	---------------------	--	--------------------

Tear Strength (BS EN ISO 13937-3:2000)	
Direction	Mean Maximum Force
Warp	74.2 N
Weft	94.8 N

Tensile Strength (BS EN ISO 13934-1:2013)	
	Result
Warp	1253.0 N
Weft	791.8 N

Elasticity of fabrics (BS EN ISO 14704-1) Strip sample					
Sample	Result				
	Elongation at 27.5N (%)	Un-recovered Elongation at 1 mins (%)	Un-recovered Elongation at 30 mins (%)	Recovered Elongation at 1 mins (%)	Recovered Elongation at 30 mins (%)
Warp	15.24	1.4	0.0	98.6	100.00
Weft	23.06	0.6	0.0	99.4	100.00

Colour Fastness To Water Spotting (BS EN ISO105-E16:2007)		
Sample	Result	
	Shade change Centre	4-5
	Shade change Periphery	4-5



Test Report	No. 28513094	Date: 16 th December 2022	Page 6 of 6
--------------------	--------------	--------------------------------------	-------------

Colour Fastness To Rubbing – Organic Solvents (BS EN ISO105-D02:2016)		
Sample	Result	
	Length	Width
Change in shade	5	5
Staining	5	5
Solvent used: Perchloroethylene		

Snagging Resistance (Rotating Chamber Method) (BS 8479:2008) 2000 Revolutions		
Measuring position	Grade	Defect type
Length	5	X
Width	5	
Total number of snags	No snags.	
Remark : Grading 5 = No snags or other surface defects 4 = Snags or other surface defects in isolated areas 3 = Snags or other surface defects partially covering the surface 2 = Snags or other surface defects covering a large proportion of the surface 1 = Snags or other surface defects covering the entire surface Classification system for surface defects A = Snagging B = Protrusions C = Indentations D = Shiners, pulled threads or other distortions of the fabric structure, occurring in close proximity to snag loops and/or not associated with any snag loop E = Visible defects due to colour contrasts F = Filamentation G = Any other defects specific to the fabric type and which detract from the original surface appearance X = No visible surface defects		

Colour Fastness To Light (BS EN ISO105- B02 : Method 2) Apparatus : Xenon-arc lamp	
Result	Exposure 7

-End of Test Report-