TÜVRheinland®
Precisely Right.

Gabriel

Softlines

Test Report	**No. 28512394a**	**Date: 11th March 2022**	**Page 1 of 5**

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

Sample Description	**:**	Grain / Grain Melange
Customer	**:**	**Gabriel**
Colour	**:**	61247
Product type	**:**	Upholstery fabric
Fiber content	**:**	

Test Performed : Selected test(s) as requested by applicant
* * * * *
Sample Receiving Date : 25th February 2022
Testing Period : 25th February 2022 – 10th March 2022
Test Result(s) : For further details, please refer to the following page(s).
This 'a' report superseeds 28512394 as the client has asked for the abrasion result to be removed.

Conclusion:

Test Property		Test Property	Results
Colour fastness to Perspiration	-	Elasticity of Fabrics	-
		Tear	-
		Snagging	-
Colour fastness to Water	-	Pilling	-
Colour Fastness to Rubbing (Foam Detergent)	-	Colour fastness to Water Spotting	Sub-con to third party, results to follow on completion
Colour Fastness to Washing	-	Colour Fastness to Rubbing (Organic Solvents)	Sub-con within group, results to follow on completion
Seam Slippage	-		
Tensile	-		

Signed for and on behalf of
TÜV Rheinland UK LTD

Dathan Stone
2022.03.11
10:22:33 Z

UKAS TESTING
8400

Dathan Stone
Senior Laboratory Technician

Results:

Colour Fastness To Perspiration (BS EN ISO 105-E04: 2013)		
Sample	**Result**	
	Acid	**Alkaline**
Colour Change	5	5
Self-Staining	5	5
Colour Staining	**Result**	**Result**
Acetate	5	5
Cotton	5	5
Polyamide	5	5
Polyester	5	5
Acrylic	5	5
Wool	5	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 Water (BS EN ISO 105-E01: 2013) test specimen in vertical position	
Sample	**Result**
Colour Change	5
Self-Staining	5
Colour Staining	**Result**
Acetate	5
Cotton	5
Polyamide	5
Polyester	5
Acrylic	5
Wool	5

Colour Fastness To Dry cleaning (BS EN ISO 105-D01: 2010)	
Sample	**Result**
Colour Change	5
Self-Staining	5
Colour Staining	**Result**
Acetate	5
Cotton	5
Polyamide	5
Polyester	5
Acrylic	5
Wool	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- Foam Detergent (BS EN ISO105-X12:2016); Size of rubbing finger: 16mm diameter		
Sample	**Result**	
	Warp	**Weft**
	Dry: 5	**Dry: 5**
	Wet: 5 **100% Soak**	**Wet: 5** **100% Soak**
Atmospheric Conditions: 20.5°C 65.5%		

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	5
Self-Staining	5
Colour Staining	**Result**
Acetate	5
Cotton	5
Polyamide	5
Polyester	5
Acrylic	5
Wool	5
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good	

Seam Slippage (BS EN ISO 13936-2:2004)	
Sample	**Result**
Warp	2.6mm
Weft	3.0mm

Tensile Strength (BS EN ISO 13934-1:2013)	
Sample	**Result**
Warp	1877.5
Weft	1743.6

Elasticity of fabrics
(BS EN ISO 14704-1)
2005 : Strip Method

Sample	Result		
	Elongation at 27.5N (%)	Recovered Elongation at 1 Mins (%)	Recovered Elongation at 30 Mins (%)
Warp	4.9	100.00	100.00
Weft	7.1	99.20	100.00

Tearing Strength
(BS EN ISO 13937-1:2000; Elmendorf Tear)

Sample	Result
Warp	>64N
Weft	>64N

Snagging Resistance (Rotating Chamber Method)
(BS 8479:2008)
2000 Revolutions

Measuring position	Grade	Defect type
Length	4-5	B
Width	4-5	
Total number of snags	<5	

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

Pilling Resistance
(BS EN ISO 12945-2:2020; Martindale Abrasion & Pilling Tester; Total Load Applied 415g, tested against wool abradent fabric)
No cleansing required
Deviation: At clients request - only pilling surface characteristics assessed

Sample	Average Result
After 2000 Rubs Rating	5 Pilling
After 5000 Rubs Rating	5 Pilling

-End of Test Report-