TÜVRheinland®
Precisely Right.

Gabriel

Softlines

Test Report	**No. 28514117**	**Date: 3rd November 2012**	**Page 1 of 7**

AMENDMENT TEST REPORT

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

Sample Description	**:**	Future Loop
Customer	**:**	**Gabriel; Hjulmagervej 55, DK, 9000 Aalborg**
Submitted by	**:**	Bente Ellingsoe
Style Number	**:**	Future Loop col. 63142
Colour	**:**	-
Product type	**:**	Upholstery fabric
Fiber content	**:**	-

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

* * * * *

Sample Receiving Date : 4th October 2023
Testing Period : 4th October 2023 – 31st October 2023
Test Result(s) : For further details, please refer to the following page(s).

Conclusion:

Test Property	Results	Test Property	Results
Colour Fastness to Washing	-	Tear Strength	-
Colour fastness to Dry Cleaning	-	Tensile Strength	-
Colour Fastness to Perspiration	-	Elasticity of Fabrics	-
Colour Fastness to Water Spotting *	-	Pilling	-
Colour Fastness to Rubbing Dry/Wet	-	Seam Slippage	-
Colour Fastness to Rubbing (Foam Detergent)	-	Snagging	-
Colour Fastness to Rubbing (Organic Solvent) *	-		
Colour Fastness to Light **	Results to be forwarded on separate test report		

Amendment due to addition of change in shade of the sample after the colour fastness to rubbing tests and the ommision of abrasion resistance at client request

* Sent to UK accredited UKAS Testing Centre
** Sent to in group Turkey accredited Testing Centre

Signed for and on behalf of
TÜV Rheinland UK LTD

Christopher Clarke

Digitally signed by Christopher Clarke
Date: 2023.11.03 09:12:41 Z

Chris Clarke
Laboratory Supervisor

UKAS TESTING
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.

Results:

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	-
Colour Staining	**Result**
Acetate	4
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	-
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	-	-
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

Colour Fastness To Water
(BS EN ISO 105-E01: 2013) test specimen in vertical position

Sample	Result
Colour Change	4-5
Self-Staining	-
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 (Dry / Wet)
Size of rubbing finger: 16mm diameter

Sample	Result			
	Change in shade of sample after test: 4-5			
	Warp		**Weft**	
	Dry: 4-5		**Dry:** 4-5	
	Wet: 4-5	**% Soak: 100%**	**Wet:** 4-5	**% Soak: 100%**

Colour Fastness To Rubbing (Foam Detergent)
Size of rubbing finger: 16mm diameter

Sample	Result	
	Change in shade of sample after test: 4-5	
	Warp	**Weft**
	4-5	4-5

Colour Fastness To Rubbing – Organic Solvents
(BS EN ISO105-D02:2016)

Sample	Result	
	Change in shade of sample after test: 4-5	
	Length	**Width**
Change in shade	4-5	4-5
Staining	4-5	4-5
Solvent used: Perchloroethylene		

Colour Fastness To Water Spotting
(BS EN ISO105-E16:2007)

Sample	Result	
	Shade Change Centre	4-5
	Shade Change Periphery	4-5

Tear Strength
(BS EN ISO 13937-3:2000)

Direction	Mean Maximum Force
Warp	214.3 N
Weft	178.3 N

Tensile Strength
(BS EN ISO 13934-1:2013)

	Result
Warp	2247.1 N
Weft	3334.9 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	5.9 %	0.0 %	0.0 %	100.0 %	100.0 %
Weft	3.1 %	0.0 %	0.0 %	100.0 %	100.0 %

Pilling Resistance
(BS EN ISO 12945-2:2020; Martindale Abrasion & Pilling Tester; Total Load Applied 415g, tested against wool abradent fabric)
No cleansing required

Sample	Average Result
After 2000 Rubs Rating	Fuzzing: 4-5 Pilling: 4-5 Matting: 4-5
After 5000 Rubs Rating	Fuzzing: 4-5 Pilling: 4-5 Matting: 4-5

Seam Slippage
(BS EN ISO 13936-2:2004)

Sample	Result
Warp	1.0 mm
Weft	1.0 mm

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

Measuring position	Grade	Defect type
Length	4	A, B
Width	3-4	
Total number of snags	>40 <5mm	

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

-End of Test Report-