



EKOTEKS

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Test
TS EN ISO/IEC 17025
AB-0583-T

EKOTEKS LABORATUVAR ve GÖZETİM
HİZMETLERİ A.Ş.
Esenyurt Firuzköy Bulvarı No:29 34325 Avcılar
İstanbul/ TÜRKİYE

TEST REPORT
DENEY RAPORU

AB-0583-T

17030616-
ing-Add

09-17

Customer name: SALDER SUNİ DERİ TEKSTİL SAN. A.Ş.
Address: Hayrabolu Organize Sanayi Bölgesi Çelik Sok. No:6 HAYRABOLU/
TEKİRDAĞ
Buyer name: -
Contact Person: OKMEN MENEKŞE
Order No: -
Article No: MARİN
Name and identity of test item: One sample of back face cream knitted fabric coated, ecru artificial leather
panel
The date of receipt of test item: 01.08.2017
Re-submitted/re-confirmation 16.08.2017
date:
Date of test: 16.08.2017-27.09.2017
Remarks: -
Sampling: The results given in this report belong to the received sample by vendor.
End-Use: -
Care Label: Not specified.
Number of pages of the report: 15

The Turkish Accreditation Agency (TURKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of test reports.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

Seal

Date
27.09.2017

Customer Representative
Özlem ULUS

Head of Testing Laboratory
Sevim A. RAZAK

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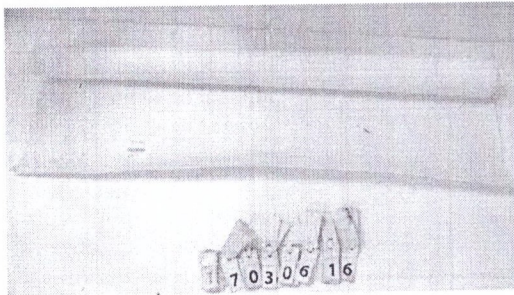
09-17

REQUIRED TESTS	RESULT	COMMENTS
PHYSICAL PROPERTIES TESTS		
Tensile Strength ⁽¹⁾	-	
Tear Strength ⁽¹⁾	-	
Seam Strength ⁽¹⁾	-	
Leather –Determination Of Flex Resistance Dry&wet ⁽¹⁾⁽⁵⁾	-	
Abrasion Resistance Martindale ⁽¹⁾⁽⁵⁾	-	
Flammability/ Smouldering Cigarette Test/original ⁽²⁾	P	
Flammability/ Butane Flame Test/original ⁽²⁾	P	
Flammability/ Smouldering Cigarette Test/after wash ⁽²⁾	P	
Flammability/ Butane Flame Test/after wash ⁽²⁾	P	
MICROBIOLOGICAL TESTS		
Determination of Antifungal Activity ⁽⁴⁾	P	
ECOLOGICAL TESTS		
Phthalates ⁽³⁾	P	
COLOUR FASTNESS TESTS		
Colour Fastness to Rubbing(Dry leather/Dry felt) ⁽¹⁾	-	
Colour Fastness to Rubbing(Dry leather/Wet felt) ⁽¹⁾	-	
Colour Fastness to Rubbing(Wet leather/Dry Felt) ⁽¹⁾	-	
Colour Fastness to Rubbing(Dry leather/Perspired felt) ⁽¹⁾	-	
Colour Fastness to Light ⁽⁶⁾⁽¹⁾	-	
P: Pass F: Fail R: Refer to retailer technologist. ⁽¹⁾ No requirements were given. ⁽²⁾ Test results evaluated according to IMO Resolution A.652(16):1989 limit values ⁽³⁾ Test results evaluated according to eco textile limit values. ⁽⁴⁾ Requirements were given by vendors. ⁽⁵⁾ These tests were performed at another laboratory. ⁽⁶⁾ This report was reissued to add these tests results.		

REMARK: Original samples are kept for 3 months and all technical records are kept for 5 years unless otherwise specified. The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95 %. Tests marked (*) in this report are not included in the accreditation schedule.

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TEST RESULTS

TENSILE STRENGTH; TS EN ISO 1421:2017 METHOD 1

Instron 5969 (Load: 50 kN), Strip Method.
Speed: 100 mm/dk±10 mm/min, Gauge length: 200 mm±1 mm
Pre-load was not applied.
The average results are given for weft and warp direction of 3 samples.
Performed in the conditioned room (20±2°C-65%±4).

	<u>RESULT</u>	<u>REQUIREMENT</u>
Weft	387.2 N	-
Warp	459.1 N	-

TEAR STRENGTH; TS EN ISO 4674-1:2006

Method A (Double Tear)/Pre-treatment was not applied.
Instron 5969. Speed:100±10 mm/min, Gauge length:100±1 mm
The average results are given for weft and warp direction of 2 samples.
Performed in the conditioned room. (20±2°C - 65% ±4)

	<u>RESULT</u>	<u>REQUIREMENT</u>
Weft	72.5 N	-
Warp	48.7 N	-

SEAM STRENGTH; TS EN ISO 13935-2: 12014(*)

INSTRON 5969 Speed: 50 mm/min, Gauge Length: 100 mm±1 mm
Seam density: 100 mm@50±2 seam.
Performed in the conditioned room (20±2°C-65%±4).

	<u>RESULT</u>	<u>FAILURE</u>	<u>REQUIREMENT</u>
Weft	210.6 N	FTS	-
Warp	350.4N	FTJ	-

FTS: Fabric tear at seam

FTJ: Çenede kumaş yırtılması.

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TEST RESULTS

LEATHER- DETERMINATION OF FLEX RESISTANCE; TS EN ISO 5402-1:2012(*)

Number of test pieces: 4 pieces
Pre-test conditioning: 23±2 °C, 50±5 % BN and Time: 48 Hours
Test condition: 23±2 °C

	<u>RESULTS</u>	<u>REQUIREMENT</u>
Wet	Damage was not observed on test pieces after 50.000 cycles	-

LEATHER- DETERMINATION OF FLEX RESISTANCE; TS EN ISO 5402-1:2012(*)

Number of test pieces: 6 pieces
Pre-test conditioning: 23±2 °C, 50±5 % BN and Time: 48 Hours
Test condition: 23±2 °C 50±5 % BN

	<u>RESULTS</u>	<u>REQUIREMENT</u>
Dry	Damage was not observed on test pieces after 250.000 cycles	-

ABRASION RESISTANCE- MARTINDALE(RUBBER –OR PLASTICS –COATED FABRICS)

TS EN ISO 5470-2:2004 (*)

Number of test pieces: Dry: 4 piece
Pre-test conditioning: 23±2 °C, 50±5 % BN and Time: 48 Hours
Test conditions: 23±2 °C, 50±5 % BN

Parameter	Test Results	Requirement	Evaluation
Number of cycles damage and degree	Moderate damage was observed on samples after 100.000 cycles	-	-

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TEST RESULTS

FLAMMABILITY; IMO Resolution A.652(16): 1989 – Smouldering Cigarette Test

Original samples were tested

Conditioning

Prior to testing: The sample was conditioned before the test for at least 16 hours in an atmosphere having a temperature of 20±5 °C and a relative humidity of 50±20 %

Test Condition : The sample was tested in an atmosphere with a temperature of 15°C to 30°C and relative humidity of 20% to 70 %.

Filling Specification

Filling Type : Non fire retardant polyurethane foam
Size : 450 x 300 x 75 mm (back) & 450 x 150 x 75 mm (seat)
Density / Hardness : 20-22 kg/m³ / Type B, 130 N

Specimen size : 800 x 650 mm (length x width)

Ignition Source : Calibrated Senior Service Virginia cigarette

“The following test results relate only to the ignitability of the combination of materials under the particular conditions of test ; they are not intended as a means of assessing the full potential fire hazard of the materials in use.”

Criteria Of Failure	Test 1	Test 2
Progressive smouldering failure		
Progressive smouldering of the interior and/or cover is observed at any time within a period of 1 hour of the placement of the cigarette	NO	NO
Flaming Failure		
Any flaming of the interior and/or cover is observed at any time within a period of 1 hour of the placement of the cigarette	NO	NO
On final examination whether progressive smouldering should be observed when dismantle assembly and examine internally	NO	NO
RESULT	PASS	

O : Observed
NO : Not observed

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Test Details

	Test 1	Test 2
Smoking ceased time (after placement of the cigarette) (min:sec)	02:21	02:28
Flame ceased time (min:sec)	-	-
Progressive smouldering time (min:sec)	-	-
Melting	NO	NO
Dripping	NO	NO
Charring	O	O

“The fabric tested meets the requirements of IMO Resolution A.652(16): 1989 (The smouldering cigarette test) ”

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TEST RESULTS

FLAMMABILITY; IMO Resolution A.652(16): 1989 – Butane Flame Test

Original samples were tested

Conditioning

Prior to testing: The sample was conditioned before the test for at least 16 hours in an atmosphere having a temperature of 20±5 °C and a relative humidity of 50±20 %

Test Condition : The sample was tested in an atmosphere with a temperature of 15°C to 30°C and relative humidity of 20% to 70 %.

Filling Specification

Filling Type : Non fire retardant polyurethane foam
Size : 450 x 300 x 75 mm (back) & 450 x 150 x 75 mm (seat)
Density / Hardness : 20-22 kg/m³ / Type B, 130 N

Specimen size : 800 x 650 mm (length x width)

Ignition Source : Butane gas Flowing at 45 ml/min @ 25 ° C

Flame Height : 35 mm

Flame Application Time : 20±1 seconds

“The following test results relate only to the ignitability of the combination of materials under the particular conditions of test ; they are not intended as a means of assessing the full potential fire hazard of the materials in use.”

Criteria Of Failure	Test 1	Test 2
Progressive smouldering failure		
Any progressive smouldering of the interior and/or cover after 120 seconds of the removal of the burner tube	NO	NO
Flaming Failure		
Any flaming of the interior and/or cover after 120 seconds of the removal of the burner tube	NO	NO
On final examination whether progressive smouldering is observed when dismantle assembly and examine internally	NO	NO
RESULT	PASS	

NO : Not observed

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Test Details

	Test 1	Test 2
Duration of flaming (after removal of the burner) (min:sec)	-	-
Duration of progressive smouldering time (min:sec)	-	-

“The fabric tested meets the requirements of IMO Resolution A.652(16): 1989 (Butane Flame Test) ”

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TEST RESULTS

FLAMMABILITY; IMO Resolution A.652(16): 1989 – Smouldering Cigarette Test

The sample has been treated with a fire-retardant chemical. Therefore the sample was subjected to the water soaking procedure as clause 4 of BS 5651:1978 then line dried.

Conditioning

Prior to testing: The sample was conditioned before the test for at least 16 hours in an atmosphere having a temperature of 20 ± 5 °C and a relative humidity of 50 ± 20 %

Test Condition : The sample was tested in an atmosphere with a temperature of 15°C to 30°C and relative humidity of 20% to 70 %.

Filling Specification

Filling Type : Non fire retardant polyurethane foam
Size : 450 x 300 x 75 mm (back) & 450 x 150 x 75 mm (seat)
Density / Hardness : 20-22 kg/m³ / Type B, 130 N

Specimen size : 800 x 650 mm (length x width)

Ignition Source : Calibrated Senior Service Virginia cigarette

“The following test results relate only to the ignitability of the combination of materials under the particular conditions of test ; they are not intended as a means of assessing the full potential fire hazard of the materials in use.”

Criteria Of Failure	Test 1	Test 2
Progressive smouldering failure	NO	NO
Progressive smouldering of the interior and/or cover is observed at any time within a period of 1 hour of the placement of the cigarette		
Flaming Failure	NO	NO
Any flaming of the interior and/or cover is observed at any time within a period of 1 hour of the placement of the cigarette		
On final examination whether progressive smouldering should be observed when dismantle assembly and examine internally	NO	NO
RESULT	PASS	

O : Observed
NO : Not observed

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Test Details

	Test 1	Test 2
Smoking ceased time (after placement of the cigarette) (min:sec)	02:37	03:04
Flame ceased time (min:sec)	-	-
Progressive smouldering time (min:sec)	-	-
Melting	NO	NO
Dripping	NO	NO
Charring	O	O

“The fabric tested meets the requirements of IMO Resolution A.652(16): 1989 (The smouldering cigarette test) ”

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TEST RESULTS

FLAMMABILITY; IMO Resolution A.652(16): 1989 – Butane Flame Test

The sample has been treated with a fire-retardant chemical. Therefore the sample was subjected to the water soaking procedure as clause 4 of BS 5651:1978 then line dried

Conditioning

Prior to testing: The sample was conditioned before the test for at least 16 hours in an atmosphere having a temperature of 20 ± 5 °C and a relative humidity of 50 ± 20 %

Test Condition : The sample was tested in an atmosphere with a temperature of 15°C to 30°C and relative humidity of 20% to 70 %.

Filling Specification

Filling Type : Non fire retardant polyurethane foam
Size : 450 x 300 x 75 mm (back) & 450 x 150 x 75 mm (seat)
Density / Hardness : 20-22 kg/m³ / Type B, 130 N

Specimen size : 800 x 650 mm (length x width)

Ignition Source : Butane gas Flowing at 45 ml/min @ 25 ° C

Flame Height : 35 mm

Flame Application Time : 20±1 seconds

“The following test results relate only to the ignitability of the combination of materials under the particular conditions of test ; they are not intended as a means of assessing the full potential fire hazard of the materials in use.”

Criteria Of Failure	Test 1	Test 2
Progressive smouldering failure		
Any progressive smouldering of the interior and/or cover after 120 seconds of the removal of the burner tube	NO	NO
Flaming Failure		
Any flaming of the interior and/or cover after 120 seconds of the removal of the burner tube	NO	NO
On final examination whether progressive smouldering is observed when dismantle assembly and examine internally	NO	NO
RESULT	PASS	

NO : Not observed

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Test Details

	Test 1	Test 2
Duration of flaming (after removal of the burner) (min:sec)	-	-
Duration of progressive smouldering time (min:sec)	-	-

“The fabric tested meets the requirements of IMO Resolution A.652(16): 1989 (Butane Flame Test) ”

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TEST RESULTS

DETERMINATION OF ANTIFUNGAL ACTIVITY: AATCC 30:2013 (Test III- Agar Plate)

Zone of inhibition (mm) ⁽¹⁾	Growth of microorganisms ⁽²⁾	Result
Was not observed	Was not observed	Effective

⁽¹⁾ Inhibition area around the width of clear zone surrounding test specimen (mm)

⁽²⁾ Growth microorganisms on the fabric / not observed

Microorganism	<i>Aspergillus niger</i> (ATCC 6275)
Incubation conditions	28±1°C
Incubation periods	7 days
Diameter of test specimens	3.8 cm
Culture medium	Sabouraud 4 % Glucose Agar

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TEST RESULTS

DETERMINATION OF PHTHALATES; CPSC-CH-C1001-09.3:2010

Test sample is extracted in suitable organic solvent in extraction device.
The extract is analyzed by HPLC and result is given by GC/MS.

	<u>Cas No:</u>	<u>RESULT</u>	<u>REQUIREMENT</u>
DBP/ Dibutylphthalate	(84-74-2)	N.D. ⁽¹⁾	
BBP/ Butylbenzylphthalate	(85-68-7)	N.D. ⁽¹⁾	
DIDP/ Di-isodecylphthalate	(26761-40-0)/ (68515-49-1)	N.D. ⁽¹⁾	
DEHP/ Di-(2-ethylhexyl) phthalate	(117-81-7)	N.D. ⁽¹⁾	
DNOP/ Di-n-octylphthalate	(117-84-0)	N.D. ⁽¹⁾	
DINP/ Di-iso-nonylphthalate	(28553-12-0)/ (68515-48-0)	N.D. ⁽¹⁾	
DIBP/ Bis – iso –butyl phthalate	(84-69-5)	N.D. ⁽¹⁾	
DHP/Di-n-hexyl phthalate	(84-75-3)	N.D. ⁽¹⁾	
DIHP/Di-C6-8-branched alkyphthalates	(71888-89-6)	N.D. ⁽¹⁾	
DHNUP/Di-C7-11-branched alkyphthalates	(68515-42-4)	N.D. ⁽¹⁾	
DMEP/Di-(2-methoxyethyl) phthalate	(117-82-8)	N.D. ⁽¹⁾	
DiPP/Di-iso pentylphthalate	(605-50-5)	N.D. ⁽¹⁾	
DnPP/Di-n pentylphthalate	(131-18-0)		
NIPP/n-Pentyl-isopentylphthalate	(84777-06-0)		
DCHP/Di-cyclohexylphthalate	(84-61-7)	N.D. (1)	
DEP/Di-ethylphthalate	(84-66-2)	N.D. ⁽¹⁾	
Total concentration		N.D. ⁽¹⁾	< 0.1 %

N.D. ⁽¹⁾: Not detected

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TEST RESULTS

RUBBING; TS EN ISO 11640:2013 (*)

Performed in the conditioned room(20±2°C-65%±4).

Evaluated with ISO 105 A02 and ISO 105 A03 standart grey scale.

	<u>Colour Change</u>	<u>Staining</u>	<u>REQUIREMENT</u>
@ 50 revs Dry leather/ Dry felt	3-4	4-5	-
@ 20 revs Dry leather/ Wet felt	4-5	4-5	-
@ 20 revs Wet leather / Dry felt	3-4	4-5	-
@ 10 revs Dry leather/ Perspirated Felt	4-5	4-5	-

LIGHT; ISO 105 B02: 1994

Atlas BETA Light Fastness Tester. The blue wool 7 was faded up to grey scale 4.

Evaluated with standard blue wool scale.

RESULT

7+

REQUIREMENT

-

COLOUR FASTNESS RATING

	COLOUR CHANGE
5	Negligible or no change
4	Slightly changed
3	Noticeably changed
2	Considerably changed
1	Much changed

	COLOUR STAINING
5	Negligible or no staining
4	Slightly stained
3	Noticeably stained
2	Considerably stained
1	Much stained