

Test Report

Report No.: A 889332-1



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Page 1 of 2
Initials Chf/Leln
Order no.: 889332
No. of appendix: 1

Subject: Materials for Protac Sensit® chair
Combination of upholstered material tested:
Cover: Designated: 600-660-3800
Sample of coated black shell fabric, Fibre composition: 100% polyester
Approximate mass per area unit: 320 g/m²
Lining: Sample of coated white knitted fabric, Fibre composition: 100% polyester/polyurethane, Approximate mass per area unit: 110 g/m²

Inner bag: Designated 600-9-601-663
Sample of nonwoven white fabric, Fibre composition: 100% polypropylene
Approximate mass per area unit: 95 g/m²
Filling: EVA /Polypropylene balls

Sampling: The test material was sampled by the client and received at the Danish Technological Institute 6 September 2019.

Method: Testing of ignitability according to EN 1021-1:2014, Furniture - Assessment of ignitability of upholstered furniture - Part 1: Ignition source smouldering cigarette.

Details of the test are given on page 2 in this report.

Period: The testing was completed 9 September 2019 at 9:30 am.

Result: According to the criteria of ignition described in EN 1021-1, chapter 3, the result is:

Non-ignition > PASS

Storage: The test material will be destroyed after 3 months, unless otherwise agreed.

Terms: The accredited test was carried out according to DANAK's general conditions see www.danak.dk and according to the General Terms and Conditions regarding Commissioned Work Accepted by the Danish Technological Institute, which apply at the time of signing the agreement. The test is only valid for the tested specimen. The test report may only be extracted, if the laboratory has approved the extract.

Date/place: 9 September 2019, Danish Technological Institute, Textile, Taastrup

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Co-signatory



 **DANAK**
TEST Reg.no. 2

Report no.: A 889332-1
Page: 2 of 2
Initials: Chf/LeIn

**Results,
continued:**

The 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.

Test method: EN 1021-1:2014.

Ignition source: Smouldering cigarette.

Conditioning atmosphere: 23±2 °C / 50±5 % RH.

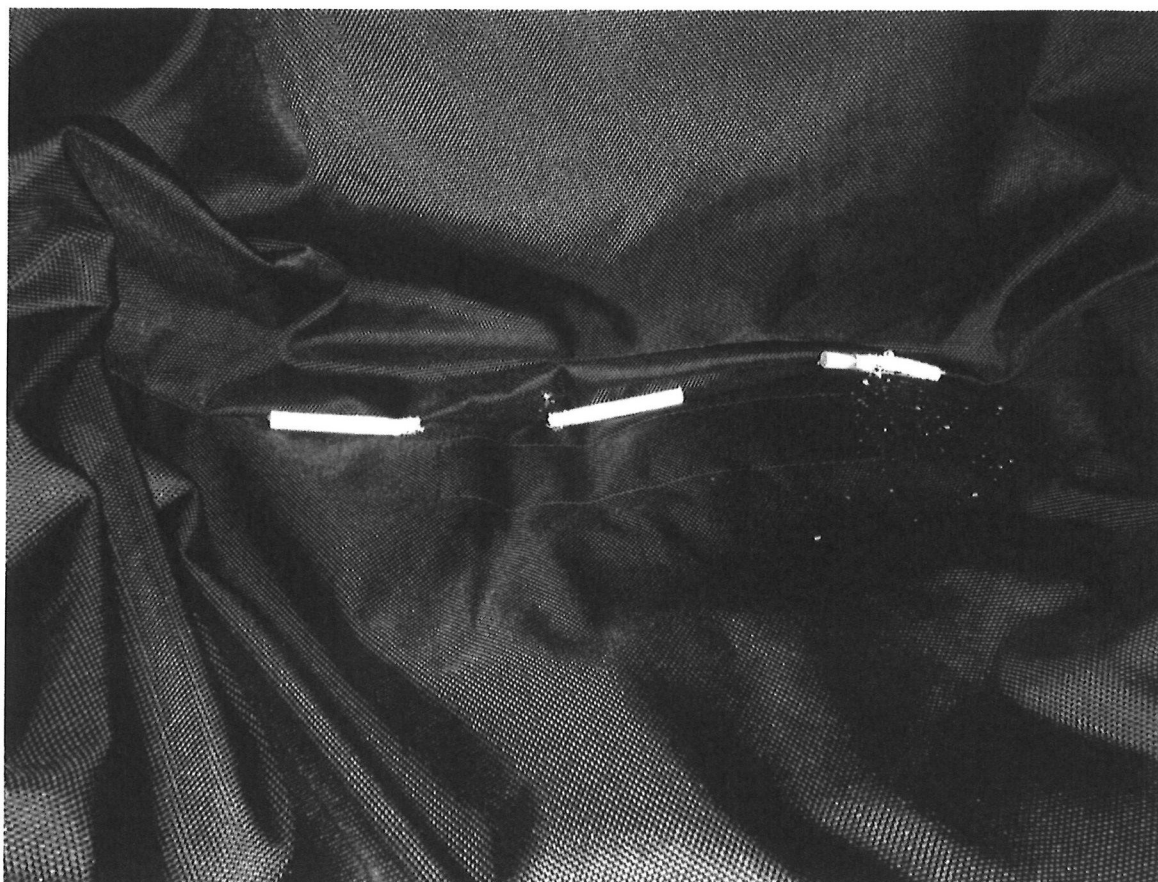
Test result: Non-ignition > PASS

Smouldering criteria	Cigarette		
	Test 1	Test 2	Test 3
Unsafe escalating combustion (3.1.a)	No	No	No
Test assembly largely consumed (3.1.b)	No	No	No
Smoulders to extremities (3.1.c)	No	No	No
Smoulders through thickness (3.1.c)	No	No	No
Smoulders more than 1 hour (3.1.d)	No	No	No
Progressive smouldering on final examination (3.1.e)	No	No	No
Flaming criteria			
Any flames initiated by smouldering source (3.2)	No	No	No
Self-extinguishing of the cigarettes before smouldering entire length	Yes	Yes	Yes

Comments:

Before testing the sample was **not** subjected to the water soaking and drying procedure described in EN 1021-1, annex D.

Report no.: A 889332-1
Appendix: 1
Page: 1 of 1
Initials: Chf/Leln



Test Report

Report No.: A 889332-2



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Page 1 of 2
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Approximate mass per area unit: 320 g/m²
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Inner bag: Designated 600-9-601-663
Sample of nonwoven white fabric, Fibre composition: 100% polypropylene
Approximate mass per area unit: 95 g/m²
Filling: EVA /Polypropylene balls

Sampling: The material for testing was submitted by the assigner and received on Danish Technological Institute 6 September 2019.

Method: Testing of ignitability according to EN 1021-2:2014, Furniture - Assessment of ignitability of upholstered furniture - Part 2: Ignition source match flame equivalent.

Details of the test are given on page 2 in this report.

Period: The testing was completed 9 September 2019 at 9:30 am.

Result: According to the criteria of ignition described in EN 1021-2, chapter 3, the result is:

Non-ignition > PASS

Storage: The test material will be destroyed after 3 months, unless otherwise agreed.

Terms: The accredited test was carried out according to DANAK's general conditions see www.danak.dk and according to the General Terms and Conditions regarding Commissioned Work Accepted by the Danish Technological Institute, which apply at the time of signing the agreement. The test is only valid for the tested specimen. The test report may only be extracted, if the laboratory has approved the extract.

Date/place: 9 September 2019, Danish Technological Institute, Textile, Taastrup

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 **DANAK**
TEST Reg.no. 2

Report no.: A 889332-2
Page: 2 of 2
Initials: Chf/Leln

**Results,
continued:**

The 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.

Test method: EN 1021-2:2014.
Ignition source: Match flame equivalent.
Conditioning atmosphere: 23±2 °C / 50±5 % RH.

Test result: Non-ignition > PASS

Smouldering criteria	Match Flame equivalent		
	Test 1	Test 2	Test 3
Unsafe escalating combustion (3.1.a)	No	No	No
Test assembly largely consumed (3.1.b)	No	No	No
Smoulders to extremities (3.1.c)	No	No	No
Smoulders through thickness (3.1.c)	No	No	No
Smoulders more than 1 hour (3.1.d)	No	No	No
Progressive smouldering on final examination (3.1.e)	No	No	No
Flaming criteria			
Unsafe escalating combustion (3.2.a)	No	No	No
Test assembly essentially consumed (3.2.b)	No	No	No
Flames to extremities, except upper margins (3.2.c)	No	No	No
Flames through thickness (3.2.c)	No	No	No
Flames longer than 120 sec. (3.2.d)	No	No	No

Comments:

Before testing the sample was **not** subjected to the water soaking and drying procedure described in EN 1021-2, annex D.

Report no.: A 889332-2
Appendix: 1
Page: 1 of 1
Initials: Chf/Leln





**DANISH
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Order no. 495817
Page 1 of 1
Appendices 2
Initials laha/prni/hbs

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Test Report

Material: Model: SenSit

Type:	Chair			Lab.no.:	495817
Length:	1000 mm	Width:	1000 mm	Height:	910 mm
Weight:	20,6 kg				
Materials:	Nylon upholstery filled with plastic balls and polystyrene balls				

Sampling: The test material was sampled by the client and received at the Danish Technological Institute 27-09-2012.

Method: EN 15373:2007 Furniture - Strength, durability and safety - Requirements for non-domestic seating. Loading according to Test severity 2. General use. Clauses 5.1, 5.2.3, 5.3.3, 6.1.1, 6.1.2, 6.1.4, 6.1.10, 6.1.12, 6.1.16, 6.1.17, 6.1.19, 6.1.20, 6.2.

Period: The testing was carried out from 01-10-2012 to 09-11-2012.

Result: Model SenSit fulfils the requirements in EN 15373:2007 Furniture - Strength, durability and safety - Requirements for non-domestic seating. Loading according to Test severity 2.

Individual results appear from Appendix 1.

Storage: The test material will be destroyed after 1 month, unless otherwise agreed.

Terms: The test has been performed according to the attached conditions, which are according to the guidelines laid down by DANAK (The Danish Accreditation). The testing is only valid for the tested specimen. The test report may only be extracted, if the laboratory has approved the extract.

Software: This report was generated by software version 2.10 of 2011-03-07.

26-11-2012, Danish Technological Institute, Wood Technology, Taastrup

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Report no. 495817
Appendix 1
Page 1 of 2
Initials laha/prni/hbs

**Test of model: SenSit
Lab. no.: 495817**

Loading according to Test severity 2.

Test	Test Method	Cycles	Load	Result
5.1 General	EN 15373, 5.1			Passed
5.2.2 Shear and squeeze points under influence of powered mechanisms	EN 15373, 5.2.2			N/A
5.2.3 Shear and squeeze points during use	EN 15373, 5.2.3			Passed
5.3.2 Swivelling chairs	EN 15373, 5.3.2			N/A
5.3.3 Non swivelling chairs	EN 15373, 5.3.3			Passed
5.4 Rolling resistance of the unloaded chair	EN 15373, 5.4			N/A
6.1.1 Static Load - Seat and Back	EN 1728, 6.2.1	10 10	Seat: 1600 N Back: 560 N	Passed
6.1.2 Static Load of Seat Front Edge	EN 1728, 6.2.2	10	Seat: 1600 N	Passed
6.1.3 Additional Static Load Test for Tilting Chairs and Intermediate Reclining Chairs	EN 1728, 6.3.1			N/A
6.1.3 Additional Static Load Test for Fully Reclining Chairs	EN 1728, 6.3.2			N/A
6.1.4 Vertical Static Load on Back	EN 15373, A.2	10	Back: 600 N Seat: 1300 N	Passed
6.1.5 Static Load Test of Foot Rail/Foot Rest and Leg Rest	EN 1728, 6.4			N/A
6.1.6 Sideways Static Load of Arms	EN 1728, 6.5			N/A
6.1.7 Sideways Static Load of Wings	EN 1728, 6.5			N/A
6.1.8 Downwards Static Load of Arms	EN 1728, 6.6			N/A
6.1.9 Vertical Upwards Static Load on Arm Rests	EN 15373, A.1			N/A
6.1.10 Combined Seat and Back Fatigue Test	EN 1728, 6.7	100000 100000	Seat: 1000 N Back: 300 N	Passed
6.1.11 Seat and Back Fatigue Test for Tilting Chairs and Intermediate Reclining Chairs	EN 1728, 6.9.1			N/A
6.1.11 Seat and Back Fatigue Test for Fully Reclining Chairs and Loungers	EN 1728, 6.9.2			N/A
6.1.12 Seat Front Edge Fatigue Test	EN 1728, 6.8	50000	1000 N	Passed
6.1.13 Arm Fatigue Test	EN 1728, 6.10			N/A
6.1.14 Leg Rest Fatigue Test	EN 1728, 6.11			N/A
6.1.15 Foot Rail Fatigue Test	EN 15373, A.5			N/A
6.1.16 Leg Forward Static Load Test	EN 1728, 6.12	10	Edge: 500 N) (Seat: 1300 N)	Passed
6.1.17 Legs Sideways Static Load Test	EN 1728, 6.13	10	Edge: 490 N) (Seat: 1300 N)	Passed

Report no. 495817
Appendix 1
Page 2 of 2
Initials laha/prni/hbs

**Test of model: SenSit
Lab. no.: 495817**

Test	Test Method	Cycles	Load	Result
6.1.18 Diagonal Static Base Load Test	EN 1728, 6.14			N/A
6.1.19 Seat Impact Test	EN 1728, 6.15	10	240 mm	Passed
6.1.20 Back Impact Test	EN 1728, 6.16	10	330 mm / 48°	Passed
6.1.21 Arm Impact Test	EN 1728, 6.17			N/A
6.1.22 Drop Test (multiple seating)	EN 1728, 6.18			N/A
6.1.23 Auxiliary writing surface static load test	EN 15373, A.3			N/A
6.1.24 Auxiliary writing surface fatigue test	EN 15373, A.4			N/A
6.2 Strength and durability requirements	EN 15373, 6.2			Passed
7 Information for use	EN 15373, 7			N/A

Report no. 495817
Appendix 2
Page 1 of 1
Initials laha/prni/hbs

**Test of model: SenSit
Lab. no.: 495817**

Photo

