



TEST Reg.No 12

2006-03-29

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Encl.: 0

Test Report

Seats for wheelchairs

AJ Stole A/S
Damagervej 22
8260 Viby J
Denmark





1 SPONSOR

AJ Stole A/S
Damagervej 22
8260 Viby J
Denmark

2 PRODUCT

Seats for wheelchairs.

3 NAME OF MANUFACTURER

Polyurethane foam: Bramming Plastindustri A/S
Upholstery fabric: Not stated.

4 PURPOSE OF TEST

By request of the Sponsor dated 2006-02-06, the product has been subjected to the test procedure of ISO 7176-16:1997 (wheelchairs).

5 SAMPLE

On 2006-02-10 the Danish Institute of Fire and Security Technology (DIFT) received the following sample:

2 pcs. of foam with dimensions 450 x 150 x 80 mm
2 pcs. of foam with dimensions 450 x 300 x 80 mm
1 pc. of cover (upholstery fabric) 1002 x 1560 x 10 mm.

The density of the foam was determined to 53 kg/m³ and the weight per unit area of the cover was determined to 832 g/m².

The following information was given by the sponsor:

Foam: Manufacturer: Bramming Plasindustri A/S, Polyurethane 53 kg/m³, type designation Pantera 170

Cover: Manufacturer: Not stated, 60% wool, 20 % elasthan, 14 % viscose and 6 % nylon, trade name; Starlight Upholstery Fabric



6 CONDITIONING

The specimens were stored in a conditioning room with an atmosphere of relative humidity of $50 \pm 5\%$ at a temperature of $23 \pm 2^\circ$. The specimens were kept in this room until the tests were performed.

7 TEST METHOD

The test was performed in accordance with

ISO 7176-16:1997 Wheelchairs – Resistance to ignition of upholstered parts – Requirements and test methods.

This standard refers to the following standards:

ISO 8191-1,2:1987 Furniture – Assessment of the ignitability of upholstered furniture –
Part 1: Ignition source: smouldering cigarette
Part 2: Ignition source: match-flame equivalent.

8 TEST RESULTS

Date of test: 2006-03-28.

Part 1: Ignition source: smouldering cigarette

Test 1:

Time (min.sec)	Observations
0.00	Application of cigarette
25.32	Cigarette extinguished (no visible smoke)
60.00	Test stopped, cover removed from the foam, no signs of smouldering combustion, damage: 60 x 12 x 1 mm.

Test 2:

Time (min.sec)	Observations
0.00	Application of cigarette
25.14	Cigarette extinguished (no visible smoke)
60.00	Test stopped, cover removed from the foam, no signs of smouldering combustion, damage: 60 x 12 x 1 mm.



Part 2: Ignition source: match-flame equivalent:

Test 1:

Time (seconds)	Observations
0	Application of test flame
20	Test flame removed, flames in the cover extinguished immediately, damage: 45 x 10 mm (only in the cover)

Test 2:

Time (seconds)	Observations
0	Application of test flame
20	Test flame removed, flames in the cover extinguished immediately: damage 52 x 12 mm (only in the cover)

9 Conclusion

The tested combination of cover and foam fulfils the requirements to ignition of ISO 8191-1 and ISO 8191-2 since no ignition occurred in either of the four (two with cigarette and two with match-flame equivalent) tests conducted. Consequently the tested combination of cover and foam fulfils the requirements of ISO 7176-16.

10 Comments

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 hazard of the finished wheelchair.

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