

ISO/WD 7176-16
Wheelchairs-Resistance to ignition of upholstered parts
Part 16: Requirements and Test Methods
Test method required: 8191-1 : 1987*
Assessment of Ignitability of Upholstered Furniture
Part 1 Smouldering Cigarette

TEST REPORT

Client: Invacare-Top End
Address: 4501 63rd Circle North
Pinellas, FL 33781

Received Date: September 10, 2007

Test Date: September 27, 2007

Report Date: September 28, 2007

Project No: 3133973SAT-001

Sample Identification: Camo material

Description: Wheelchair cover material with camouflage print.

Sample Conditioning: 73.4±4°F and 50±5% R.H. for 24 hrs.

Environmental Conditions: 72°F and 57% r.h.

This Test Witnessed by: N/A

***Modification:** The ISO 8191-1 standard requires that the test specimen be 75±2mm thick. The wheelchair seat sample provided by Invacare had a thickness of 13.5mm and the sample was tested at that thickness.

SUMMARY OF TEST METHOD

The specimen was tested in accordance to ISO 8191 part 1 as required by ISO/WD 7176-16. This standard is for assessing the ignitability of material combinations. The combinations of filling materials and fabrics are tested as a seat. The ignition source used is a smoldering cigarette. The cigarette is lit and placed along the junction between the seat and back of the test specimen as specified in the standard. If ignition or smoldering after 1 hour is not observed, then a replicate test is performed. Both test runs must meet the test criteria to pass this test standard.

TEST CRITERIA

The specimens can not have escalating combustion. Within the test duration, the specimen can not have flames reach the extremities (lower margin, either side or full thickness), burned until consumed, smolder to extremities (lower margin, either side or full thickness), or smolder until consumed. On final examination, the specimens can not have char >100 mm in any direction apart from upwards from the location of the flame source. (Applies to smoldering ignition only.)

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

TEST RESULTS

CRITERIA	Test 1	Test 2
Escalating Combustion	No	No
Flames reach extremities *	No	No
Burned until consumed*	No	No
Smoldered to extremities*	No	No
Smoldered until consumed*	No	No
Char > 100 mm on final examination	No	No

**Within the test duration (1 hour from the beginning of the test)*

Other Information	Test 1	Test 2
Vertical Panel Damaged Area	91mm x 16mm x 3mm	89mm x 15mm x 3mm
Horizontal Panel Damaged Area	93mm x 17mm x 3mm	92mm x 17mm x 3mm
Flames Extinguished	No	No

Conclusion

The sample submitted and described herein PASSED the criteria.

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This report contains a total of three pages.



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September 28, 2007

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September 28, 2007