

Test Report

WARRES NO. 301761

Ad-Hoc Ignitability test
Using Ignition source 0 & 1
Specified in
BS5852: Part 1 1987
Fire Tests For Furniture
Part 1. Method Of Test For The Ignitability
By Smoker's Materials Of Upholstered
Composite For Seating

Sponsored By
MTFX(Special effect Fireworks)
The Cottage
New Road
Olveston
Bristol BS35 4DX.

Warrington
FIRE
research
CONSULTANCY • TESTING

(fmkp)

The Professionals in Fire Safety

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1 Introduction

Warrington Fire Research was commissioned to carry out an ad-hoc test on HDPE flake using the ignition sources specified in BS5852: Part 1. The standard is for testing upholstered composite and though the reference is made to this standard in this report the test was not carried out strictly to BS5852: 1987 Part 1

2 Purpose Of Test

To determine the ignitability of HDPE flakes when tested against ignition source 0 & 1 specified in BS5852: Part 1 1987 - 'Fire test for furniture. Part 1 Methods of test for the ignitability by smokers' material of upholstered composite for seating.

3 Scope Of Test

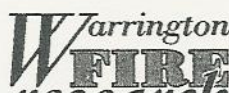
BS 5852: Part 1 1987 describes methods of test for assessing the ignitability of upholstered composites for seating, eg covers and filling, when they are subjected to flaming sources smouldering cigarette or a lighted match as might be applied accidentally. It does not cover ignition caused by deliberate acts of vandalism. The standard only details method to assess the ignitability of upholstery furniture however, the principal of the method was used to assess the resistance to ignition of HDPE flakes in an ad-hoc test.

4 Description Of Test Specimens

The description of the specimen given below has been prepared from information provided by the sponsor of the test. All values quoted are nominal, unless tolerances are given.

The product was HDPE flakes with fire retardant and antistatic additive of flake size 75mm².

The specimen was supplied by the sponsor of the test. Warrington Fire Research Centre was not involved in any selection or sampling procedure.



5 Conditioning Of Specimen

The specimen was received on 13 November 2000.

The specimen was conditioned for at least 72 hours in indoor ambient conditions and then immediately before the test for at least 16 hours in an atmosphere having a temperature of $20 \pm 5^{\circ}\text{C}$ and a relative humidity of $50 \pm 20\%$.

6 Date Of Test

The test was performed on 19 December 2000.

7 Test Procedure

The product was placed in an aluminium tray and exposed to ignition sources consisting of smouldering cigarette and butane flame No.1. This report should be read in conjunction with BS5852: Part 1 1987.

8 Test Results

The following test results relate only to the ignitability of the combination of upholstery composites 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.

Two tests were carried out against smouldering cigarette no flaming or progressive smouldering was observed.

Two tests were carried out using butane flame ignition source No 1. No flaming or progressive smouldering was observed after the ignition source was removed.

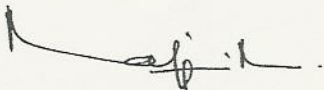
9 Validity

The specification and interpretation of fire test methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of test reports over five years old should be considered by the user. The laboratory that issued the report will be able to offer, on behalf of the legal owner, a review of the procedures adopted for a particular test to ensure that they are consistent with current practices, and if required may endorse the test report.

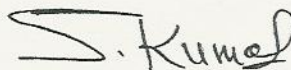
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Tested by

Approved



S. RAMALINGAME



S. KUMAR
Technical Manager
for and on behalf of
WARRINGTON FIRE RESEARCH CENTRE

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