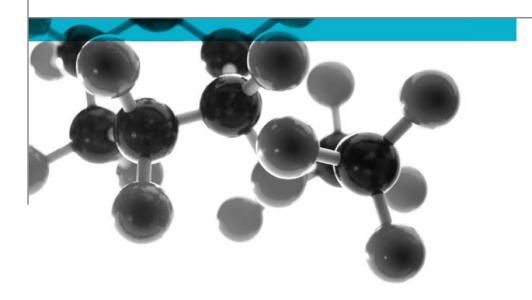
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ISO 3795: 1989



Determination Of Burning Behaviour Of Interior Materials For Motor Vehicles

A Report To: Plastics Direct Limited.

Document Reference: 415228

Date: 18th June 2019

Issue: 1

Page 1



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Executive Summary

Objective

To determine the performance of the following product when tested in accordance with ISO 3795: 1989.

Generic Description	Product reference	Thickness	Weight per unit area
Polyvinyl chloride (PVC) sheet	"Veka Plan CX Duo"	3mm	1.64kg/m²
Please see page 5 of this test report for the full description of the product tested			

Test Sponsor

Plastics Direct Limited., Units E + F Vulcan Business Park, Derker Street, Oldham, OL1 4AS

Test Results:

Specimen	Burn rate
1	0 mm/min
2	0 mm/min
3	0 mm/min
4	0 mm/min
5	0 mm/min

An uncertainty of measurement estimation has been conducted in relation to the Burning Rate. The findings are as detailed in Annex A of this report.

Date of Test

14th June 2019

Signatories

Responsible Officer

T. Mort *

Senior Technical Officer

Authorised

S. Deeming *

Business Unit Head

* For and on behalf of Warringtonfire.

Report Issued: 18th June 2019

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Test Details

Purpose of test

To determine the flammability of the material when it is tested in accordance with ISO 3795:1989 "Determination of Burning Behaviour of Interior Materials for Motor Vehicles, and Tractors and Machinery for Agriculture and Forestry".

Fire test study group/EGOLF

Certain aspects of some fire test specifications are open to different interpretations. The Fire Test Study Group and EGOLF have identified a number of such areas and has agreed Resolutions which define common agreement of interpretations between fire test laboratories which are members of the Groups. Where such Resolutions are applicable to this test they have been followed.

Instruction to test

The test was conducted on the 14th June 2019 at the request of Plastics Direct Limited, the sponsor of the test.

Provision of test specimens

The specimens were supplied by the sponsor of the test. Warringtonfire was not involved in any selection or sampling procedure.

Conditioning of specimens

The specimens were received on the 12th June 2019.

Prior to the test the specimens were conditioned for at least 24 hours in an atmosphere having a temperature of $23 \pm 2^{\circ}$ C and a relative humidity of $50 \pm 5\%$.

Test procedure

Five specimens, each measuring 100 mm wide by 356 mm long, were tested with the white face surface downwards to the test flame, in accordance with the test procedure specified in the Standard, the gas supplied to the Bunsen burner being natural gas.

Specimen orientation

The product did not have a directional production quality, therefore, the test was conducted in a single direction and the results of the test have been reported.

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Description of Test Specimens

The description of the system given below has been prepared from information provided by the sponsor of the test. This information has not been independently verified by Warringtonfire. All values quoted are nominal, unless tolerances are given.

Generic type	Polyvinyl chloride (PVC) sheet
Product reference	"Veka Plan CX Duo"
Detailed description / composition details	Solid PVC skin, foamed back
Name of manufacturer	Veka
Thickness	3mm (stated by sponsor)
	3.05mm (determined by Warringtonfire)
Weight per unit area	1.64kg/m ² (stated by sponsor)
	2.86kg/m² (determined by Warringtonfire)
Colour reference	"White"
Flame retardant details	See Note 1 below
Brief description of manufacturing process	Extruded

Note 1. The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product.

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Test Results

Results of test

The burn rate was calculated using the formula:

 $B = 60 \, s/t$

where B = Burning rate in mm per minutes

s = Burnt distance in mm, and

t = Time in seconds to burn distance s mm

Specimen No.	Time for flame to reach the first measuring point (seconds)	Time for flame to reach the final measuring point (seconds)	Burning time, t (seconds)	Distance burnt , s (mm)	Burning Rate (mm/min)
1	Did not reach	Did not reach	0	Not applicable	0
2	Did not reach	Did not reach	0	Not applicable	0
3	Did not reach	Did not reach	0	Not applicable	0
4	Did not reach	Did not reach	0	Not applicable	0
6	Did not reach	Did not reach	0	Not applicable	0

An uncertainty of measurement estimation has been conducted in relation to the Burning Rate. The findings are as detailed in Annex A of this report.

Applicability of test results

The test results relate only to the behaviour of the specimens under the particular conditions of this test, they should not be used to infer the fire hazards of the material in other forms or under other fire conditions.

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results. Care should be taken to ensure that any product which is supplied or used is fully represented by the specimens which were tested.

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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Annex A

Uncertainty of measurement

Specimen No.	1	2	3	4	5	6
Burning Rate	±0	±0	±0	±0	±0	±0

The uncertainty of measurement value is reported as zero when the flame front does not reach either reference mark i.e. 38mm or 292mm.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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Revision History

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Revised By:	Approved By:
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