

SOUTHWEST RESEARCH INSTITUTE

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CHEMISTRY AND CHEMICAL ENGINEERING DIVISION
DEPARTMENT OF FIRE TECHNOLOGY
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December 5, 1991

Flame Safe
2653 Warfield Avenue
Fort Worth, Texas 76106

Attn: Mr. Louis Jacobini

Re: SwRI Project No. 01-4510-117-a **FINAL REPORT**
Small Scale Fire Resistance Test in Accordance with Section 1237.1 of
Title 19 - Public Safety, of the Health and Safety Code, regulations
from the California Administrative Code
(12-Second Vertical Bunsen Burner Test)

Gentlemen:

This letter constitutes our final report on your 100-percent Cotton towel identified as Firebuster, submitted for evaluation by the referenced test method. The fabric was tested as received. **No water extraction or accelerated weathering was performed.**

The results apply specifically to the specimens tested, in the manner tested, and not to the entire production of these or similar materials, nor to the performance when used in combination with other materials. All test data are on file and are available for review by authorized persons.

TEST METHOD AND PROCEDURE

The material was tested in accordance with Section 1237.1 of Title 19 - Public Safety, of the Health and Safety Code, regulations from the California Administrative Code. This is a 12-seconds vertical Bunsen Burner test that establishes afterflame time and char length on each specimen.

The specimens were conditioned for a minimum of 1 hour and no more than 1.5 hours at 140°F prior to testing. Each specimen was inserted into the cabinet and the 1-1/2-in. (38.1-mm) Bunsen burner flame (approximately 1650°F) was applied vertically at the middle of the lower edge of the specimen for 12 seconds.

The afterflame time of the specimen was recorded to the nearest 0.1 seconds and the char length to the nearest 0.1 in. (2.5 mm). The test criteria for this test are specified in Section 1237 of the above referenced document, as follows:

Char Length:	Maximum average, 3.5 in.
Char Length:	Maximum, individual specimen, 6.0 in.
Afterflame :	Maximum, individual specimen, 2 seconds

This report is for the information of the client. It may be used in its entirety for the purpose of securing product acceptance from duly constituted approval authorities. Neither this report nor the name of the Institute shall be used in publicity or advertising.



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Section 1237.1
12-sec. Vertical Bunsen Burner Test

TEST SPECIMEN AND NUMBER OF DETERMINATIONS

The specimens were identified as Firebuster. They were described as 100-percent cotton towel with Fabric Safe flame retardant sprayed at 300 sq.ft/gallon. Each specimen was 2.5 x 13 in. (63.5 x 330.2 mm), nominal thickness 0.91 in. (23.1 mm). A minimum of three specimens were tested in each the machine direction (warp) and the across-machine directions (filling). The fabric was tested as received. No water extraction or accelerated weathering was performed.

TEST RESULTS

The test was conducted November 26, 1991, with the following results:

Machine Direction:

	Run 1	Run 2	Run 3	Average
Char Length, in.	1.00	1.25	1.00	1.10
Afterflame, sec.	0	0	0	0

Across-Machine Direction:

	Run 1	Run 2	Run 3	Average
Char Length, in.	0.38	0.75	0.50	0.54
Afterflame, sec.	0	0	0	0

The material, when tested in accordance with Section 1237.1 of Title 19 - Public Safety, of the Health and Safety Code, regulations from the California Administrative Code (12-Second Vertical Bunsen Burner Test), is considered to have passed.

If you should have any questions/comments or if we can be of further assistance, please contact us.

Sincerely,

Gladys M. Finley
Gladys M. Finley
Project Leader
Fire Testing Services

GMF/rr

Approved by:

Alex B. Wenzel
Alex B. Wenzel
Director
Department of Fire Technology