



SGS U.S. Testing Company Inc.

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REPORT NUMBER: 135436
DATE: January 18, 2000
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REPORT OF TEST

CLIENT: Environmentally Safe Products, Inc.
313 West Golden Lane
New Oxford, Pennsylvania 17350

SUBJECT: Surface Burning Characteristics of Building Materials

AUTHORIZATION: Client's letter of authorization dated January 6, 2000 by Tom Dauber.

SAMPLE ID: One (1) sample of sheet material was submitted on January 7, 2000 and identified by the Client as:

"L4000"

TEST PROCEDURE: The submitted sample was tested for Flammability in accordance with the procedures outlined in ASTM E-84-98.

TEST DATES: January 13, 2000.

PREPARED BY:

Nikolay Kitov, Technician
Fire Technology

SIGNED FOR THE COMPANY BY:

Hiten Pandya, Manager
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Member of the SGS Group

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CLIENT: Environmentally Safe Products, Inc.

INTRODUCTION:

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E-84-98. The report also includes Material Identification, Method of Preparation, Mounting and Conditioning of the specimens.

The tests were performed in accordance with the specifications set forth in ASTM E-84-98, Standard Test Method for Surface Burning Characteristics of Building Materials", both as to equipment and test procedure. This test procedure is similar to UL-723, ANSI No. 2.5, NFPA No. 255 and UBC 42-1.

The test results cover two parameters: Flame Spread and Smoke Developed Values during a 10-minute fire exposure. Inorganic cement board and red oak flooring are used as comparative standards and their responses are assigned arbitrary values of 0 and 100, respectively.

PREPARATION AND CONDITIONING:

One (1) 2-feet x 24-feet of material was laid on a 2-inch galvanized hexagonal wire mesh, supported by steel rods spanning the width of the tunnel.

The sample was conditioned at 73° ± 5° Fahrenheit and 50 ± 5% relative humidity.

TEST PROCEDURE:

The tunnel was thoroughly pre-heated by burning natural gas. When the brick temperature, sensed by a floor thermocouple, had reached the prescribed 105° Fahrenheit ± 5° Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E-84-98 procedures.

The operation of the tunnel was checked by performing a 10-minute test with inorganic board on the day of the test.

CLIENT: Environmentally Safe Products, Inc.

TEST RESULTS:

The test results, calculated in accordance with ASTM E-84-98 for Flame Spread and Smoke Developed Values are as follows:

Test Specimen	:	"L4000"
Flame Spread Index*	:	5
Smoke Developed Value*	:	50

*Graphs of the Flame Spread, Smoke Developed and Time-Temperature are shown on the attached charts at the end of this report.

OBSERVATIONS:

Ignition was noted after 30 seconds followed by charring and blistering of the specimen directly exposed to the flame. Also observed were flaking embers and flaming dripping as the flamefront advanced 1.0 feet after 1.5 minutes. Neither afterburn nor afterglow was evident upon test completion.

RATING:

The National Fire Protection Association Life Safety Code 101, Section 6-5.3, "Interior Wall and Ceiling Finish Classification", has a means of classifying materials with respect to Flame Spread and Smoke Developed when tested in accordance with NFPA 255, "Method of Test of Surface Burning Characteristics of Building Materials", (ASTM E-84).

The classifications are as follows:

Class A Interior Wall & Ceiling Finish:	Flame Spread -	0-25;
	Smoke Developed -	0-450
Class B Interior Wall & Ceiling Finish:	Flame Spread -	26-75;
	Smoke Developed -	0-450
Class C Interior Wall & Ceiling Finish:	Flame Spread -	76-200;
	Smoke Developed -	0-450

Since the sample received a Flame Spread of 5 and a Smoke Developed Value of 50, it would fall into the Class A Interior Wall & Ceiling Finish Category.

End of Report

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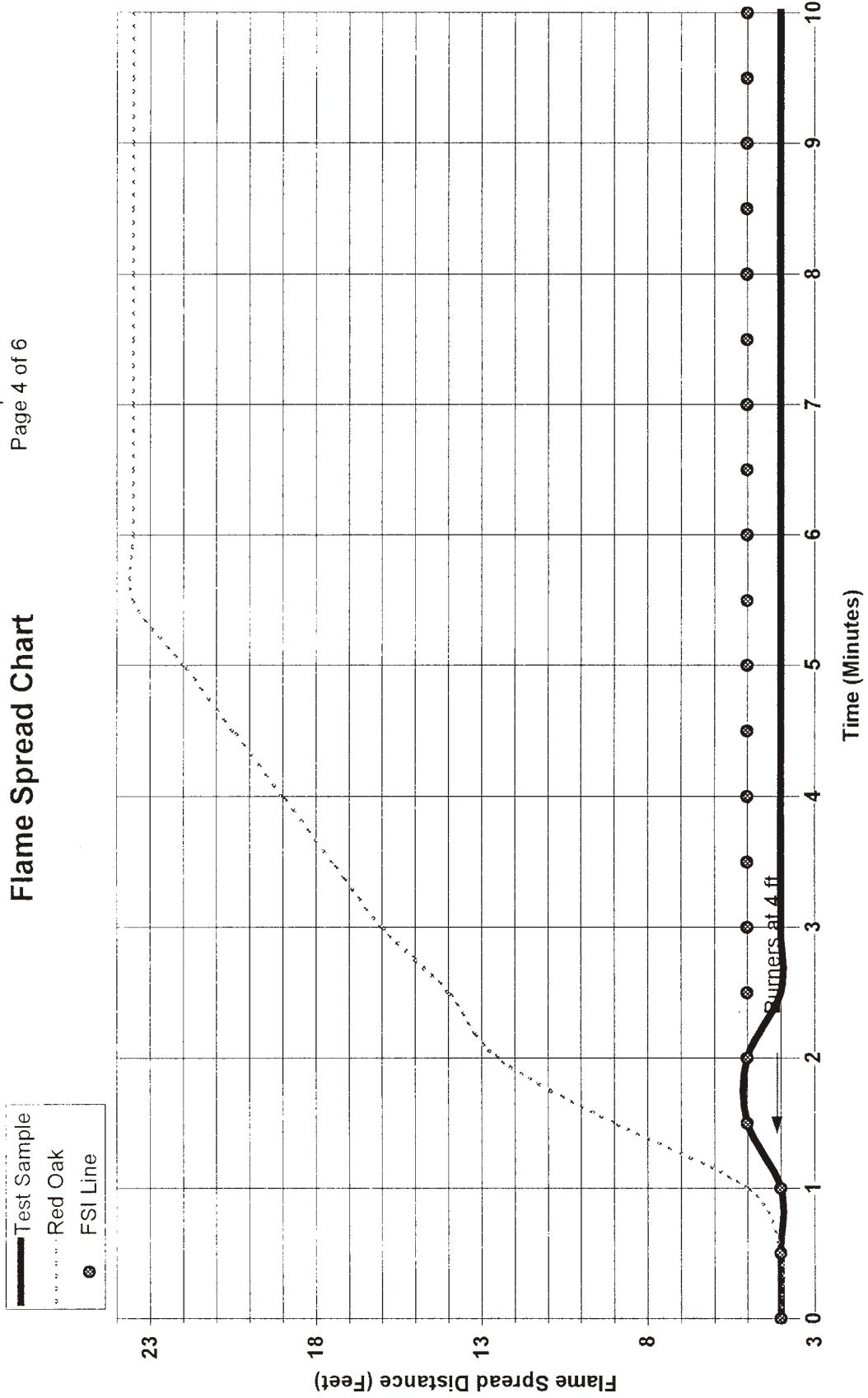
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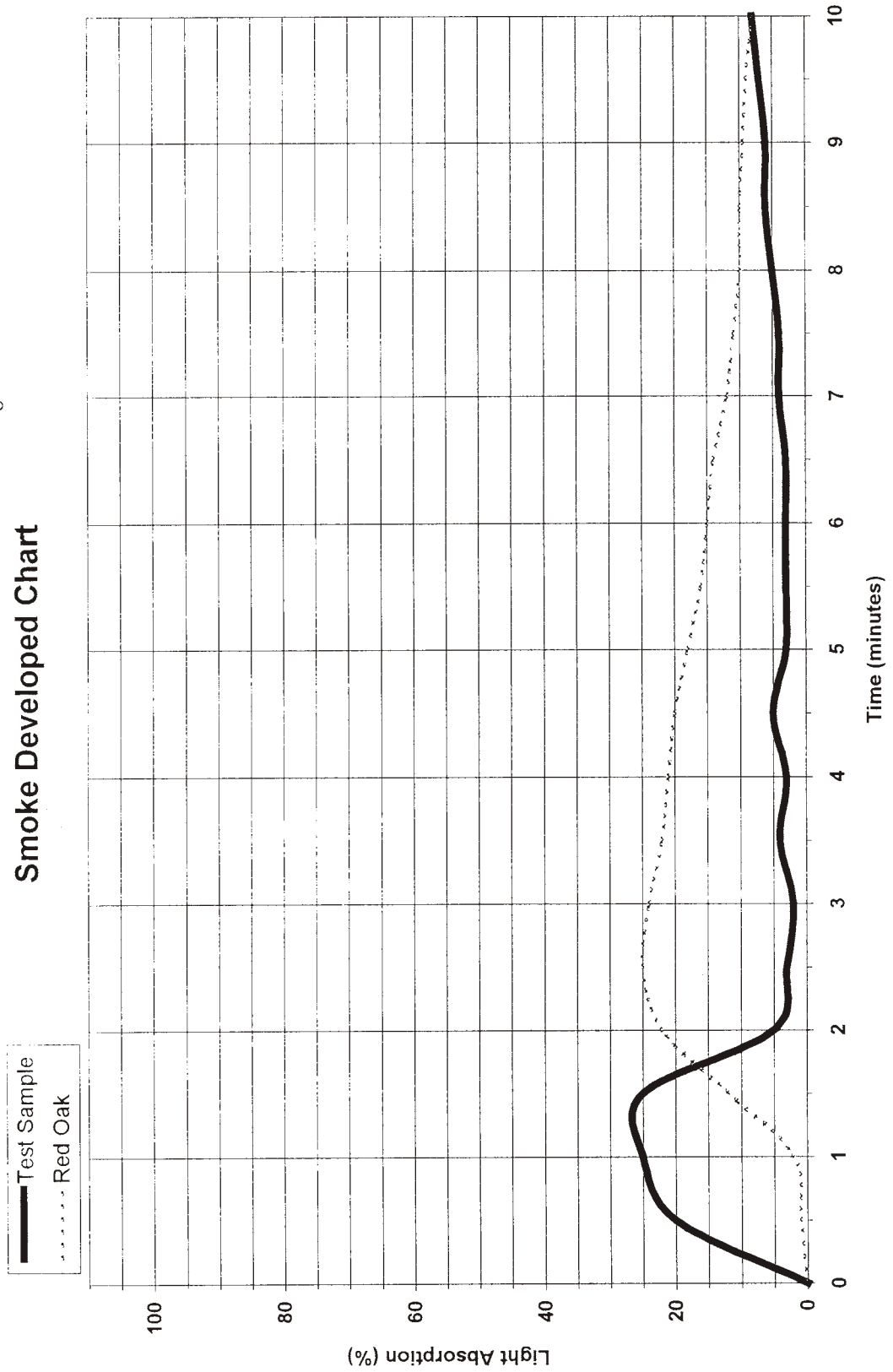
Flame Spread Chart



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Smoke Developed Chart



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Temperature - Time Curve

