

US-D-OPS-04-01-T



SGS U.S. Testing Company Inc.

5555 Telegraph Road • Los Angeles, CA 90040 • Tel: 323-838-1600 • Fax: 323-722-8251

CLIENT: GE PLASTICS
One Plastics Avenue
Pittsfield, MA 01201
Dennis Furlano

Test Report No: 174769 Date: February 27, 2003

SAMPLE ID: The Client submitted and identified the following test material as Lexan Corrugated Sheet, 7271.

DATE OF RECEIPT: Entered into SGS USTC sample tracking system on January 15, 2003 as STN 35845.

TESTING PERIOD: February 18, 2003.

AUTHORIZATION: Client's Purchase Order No. P1935000.

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-01, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

TEST RESULTS:	<u>Flame Spread</u>	<u>Smoke Density</u>
	5	90

For detailed results see page 3.

Tested by

Brian Ortega
Test Technician

Signed for and on behalf of
SGS U.S. Testing Company Inc.

Greg Banasky
Supervisor Fire Technology

This report is issued by SGS U.S. Testing Company Inc. under its General Conditions for Testing Services (copy available upon request). SGS U.S. Testing's responsibility under this report is limited to proven negligence and will in no case be more than the amount of the testing fees. Except by special arrangement, samples are not retained by SGS U.S. Testing for more than 30 days. The results shown on this test report refer only to the sample(s) tested unless otherwise stated, under the conditions agreed upon. Anyone relying on this report should understand all of the details of the engagement. Neither the name, seals, marks nor insignia of SGS U.S. Testing may be used in any advertising or promotional materials without the prior written approval of SGS U.S. Testing. The test report cannot be reproduced, except in full, without prior written permission of SGS U.S. Testing Company Inc.
Member of the SGS Group (Société Générale de Surveillance)

US-D-OPS-04-03-T



SGS U.S. Testing Company Inc.

Report No.: 174769
 Date: February 27, 2003
 Page: 2 of 4

CLIENT: GE PLASTICS

PREPARATION AND CONDITIONING: The sample material was submitted in six pieces, 24" wide by 48" long, conforming to test chamber dimensions. The sample was supported during testing by 2" hexagonal mesh poultry netting running the length of the test chamber and 1/4" round metal rods placed at two foot intervals across the width of the test chamber.

Prior to testing, the specimen was placed in the conditioning room (maintained at 73.4 ± 5° F and a relative humidity of 50 ± 5%) and allowed to reach moisture equilibrium.

SUMMARY OF ASTM E84 RESULTS: Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5.

<u>SAMPLE IDENTIFICATION</u>	<u>FLAME SPREAD</u>	<u>SMOKE DENSITY</u>
Lexan Corrugated Sheet, 7271	5	90

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

<u>NFPA CLASS</u>	<u>UBC CLASS</u>	<u>FLAME SPREAD</u>
A	I	0 through 25
B	II	26 through 75
C	III	76 through 200

BUILDING CODES CITED:

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 1994 Edition.
2. Uniform Building Code, 1994 Edition, Chapter 8, Interior Finishes, Sections 801-807.



SGS U.S. Testing Company Inc.

CLIENT: GE PLASTICS

US-D-OPS-04-03-T

Report No.: 174769
Date: February 27, 2003
Page: 3 of 4

E 84 TEST DATA SHEET:

CLIENT: GE Plastics DATE: 2/18/03

SAMPLE: Lexan Corrugated Sheet, 7271

THICKNESS: 0.035" nominal

FLAME SPREAD:

IGNITION: 30 seconds

FLAME FRONT: 1 foot maximum

TIME TO MAXIMUM SPREAD: 3 minutes, 7 seconds

TEST DURATION: 10 minutes

CALCULATION: $8.34 \times 0.515 = 4.29$

SUMMARY: FLAME SPREAD: 5 SMOKE DENSITY: 90

OBSERVATIONS: Sample surface ignition occurred at 30 seconds. A maximum flame front advance of 1 foot was observed at 3 minutes, 7 seconds.

* Due to intense flaming, the test was terminated at 4 minutes, 31 seconds. The two Flame Spread Values reported reflect the Flame Spread at time of termination and the Flame Spread had the flame front advanced to 19.5 feet 1 second after time of test termination. Note: The laboratory plotted the smoke density value for the remaining 5 minutes, 29 seconds at 0% transmittance and derived a Smoke Density value of 465.

US-D-OPS-04-03-T

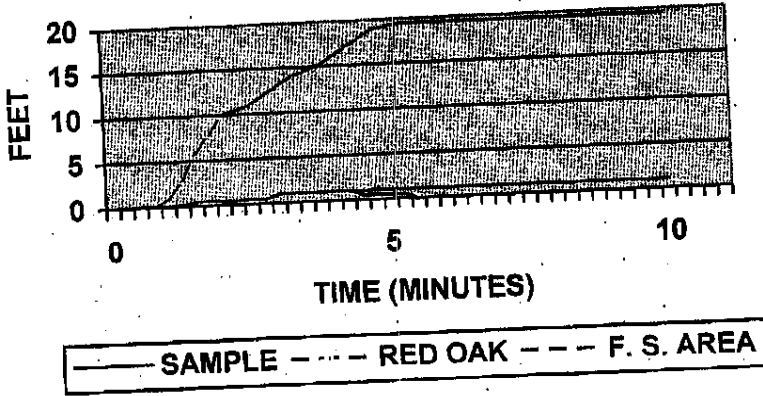


SGS U.S. Testing Company Inc.

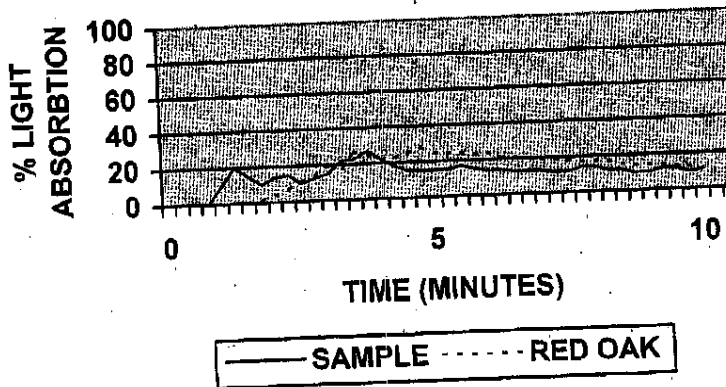
Report No.: 174769
Date: February 27, 2003
Page: 4 of 4

CLIENT: GE PLASTICS

FLAME SPREAD LEXAN CORRUGATED SHEET, 7271



SMOKE DEVELOPED LEXAN CORRUGATED SHEET, 7271



End of Report