



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: 168240-4	Date: July 17, 2002
---------------------------------	----------------------------

SAMPLE ID: The Client submitted and identified the following test material as 16 mm Lexan Thermoclear LTC 3T16 Sheet, 7271.

DATE OF RECEIPT: Entered into SGS USTC sample tracking system on May 6, 2002 as STN 34779.

TESTING PERIOD: June 13, 2002.

AUTHORIZATION: Client's Purchase Order Number P17879000.

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: Flame Spread Smoke Density

55

< 450*

For detailed results see page 3.

*See observations on 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

Page 1 of 4

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)



SGS U.S. Testing Company Inc.

Report No.: 168240-4

CLIENT: GE PLASTICS

Date: July 17, 2002

Page: 2 of 4

PREPARATION AND CONDITIONING: The sample material was submitted in three pieces, 24" wide by 96" 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 ¼" 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 $73.4 \pm 5^\circ$ F and a relative humidity of $50 \pm 5\%$) 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>
16 mm Lexan Thermoclear Sheet LTC 3T16 Sheet,7271	55	< 450*

*See observations on page 3.

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.

Report No.: 168240-4

CLIENT: GE PLASTICS

Date: July 17, 2002

Page: 3 of 4

E 84 TEST DATA SHEET:CLIENT: GE Plastics DATE: 6/13/02SAMPLE: 16 mm Lexan Thermoclear LTC 3T10 Sheet, 7271THICKNESS: 16 mm nominal**FLAME SPREAD:**IGNITION: 1 minuteFLAME FRONT: 19.5 feet maximumTIME TO MAXIMUM SPREAD: 5 minutes, 33 secondsTEST DURATION: 5 minutes, 36 secondsCALCULATION: $4900 / (195 - 102.70) = 53.09$ **SUMMARY: FLAME SPREAD: 55 SMOKE DENSITY: <450**

OBSERVATIONS: Sample surface ignition occurred at 1 minute. A maximum flame front advance of 19.5 feet was observed at 5 minutes, 33 seconds.

* Due to intense flaming, the test was terminated at 5 minutes, 36 seconds. Had the test continued for the normal 10 minute period, the flame spread value would have remained unchanged. From the smoke density value obtained at the time of termination, it is deemed that the smoke density value at ten minutes would be less than 450.



SGS U.S. Testing Company Inc.

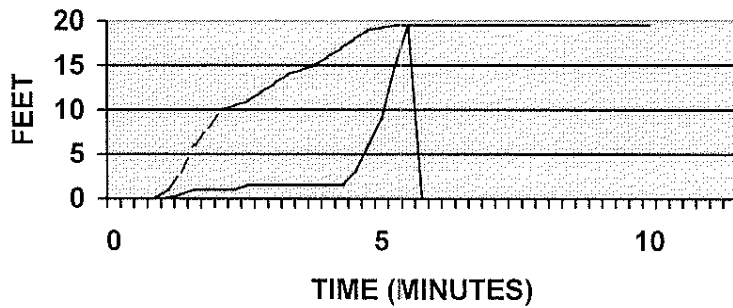
Report No.: 168240-4

CLIENT: GE PLASTICS

Date: July 17, 2002

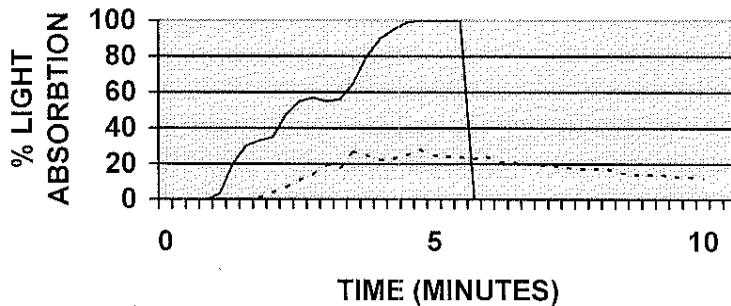
Page: 4 of 4

FLAME SPREAD LEXAN THERMOCLEAR LTC 3T16 SHEET



— SAMPLE - - - - RED OAK - - - - F.S. AREA

SMOKE DEVELOPED LEXAN THERMOCLEAR LTC 3T16 SHEET



— SAMPLE - - - - - RED OAK

End of Report