SPECTRO®
Analytical Labs Limited
CIN:U74220DL1998PLC092698

TEST REPORT

Test Report Issued To:

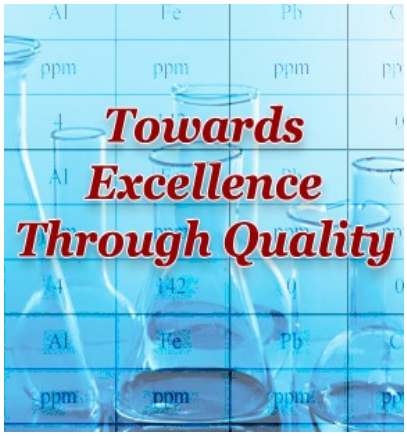
CREST COMPOSITES & PLASTICS PVT. LTD.

SURVEY NO.609, VILLAGE : SHETRA, TAL. & DIST. KHEDA, GUJARAT - 387560, INDIA, KHEDA, GUJARAT, INDIA,

Test Report No: M191224010/M191224010-1
Date of Issue: 31-Dec-2019

Sample Booking/Receipt Date: 24-Dec-2019
Date of Start of Testing: 30-Dec-2019
Date of Completion of Test: 30-Dec-2019

Customer Relationship Number: M29687



Sample Description :
CPOL-7053 (600 MM X 1000 MM)

Customer Reference No :
LETTER DT. 18/12/2019

Kind Attention : MR. MEHBOOB YAQOOB
E-Mail: tech.services@crestcomposites.com **Contact No:** 9909925166

Sample Condition : *GOOD CONDITION*

Sample Quantity (Approx) : - Sample Size (Approx) : -

SAMPLE NOT DRAWN BY OUR LABORATORY. THE RESULTS RELATE ONLY TO THE ITEMS TESTED

SPECTRO ANALYTICAL LABS LTD

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Date: 2019.12.31 15:51:37 +05:30

Report Issued by

ULR-TC631419000067044F

TEST REPORT FOR DETERMINING THE FLAME SPREAD AND SMOKE DEVELOPED INDEX.

Test Sponsor:
Crest Composites & Plastics Pvt. Ltd.

Product Name:
CPOL-7053 (**Name Declared by test sponsor**)

Test Standards:
ASTM E84-2018; Standard Test Method for Surface Burning Characteristics of Building Materials.

Testing Laboratory:
Spectro Analytical Labs Limited
S-1 GNEPIP, Surajpur Industrial Area
Kasna, Greater Noida, Phase – V
Gautam Budha Nagar (U.P.)
Pin Code: 201308
Ph: 0120-2341251/52

Specimen Verification:

Length : 1000 mm
Width : 600 mm

Sample Preparation: The sample was 600 mm in width and 1000 mm in length. Approx. 8 numbers of samples were used to spread over the tunnel to form the requisite specimen length. Prior to the testing, the sample was conditioned to constant weight at a temperature of 73 ± 5°F (23 ± 3°C) and a relative humidity of 50 ± 5%. During testing the sample was self-supporting.

Ambient Temperature
At the time of Commencement of test the Average ambient Temperature was 10°C.

Analyst Signature

Testing(TC-6314)

ULR-TC631419000067044F

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Results and Discussion

Flame Spread Result	
Calculated Flame Spread (CFS)	0
Flame Spread Index	**0**
Smoke Developed Result	
Calculated Smoke Developed	436.9
Smoke Developed Index	**450**

Result: Class 1

Note: For Further details and observations refer to Annexure A and B

Classification Requirement

	Flame Spread Index	Smoke Development
Class 1 or A	0 - 25	450 Maximum
Class 2 or B	26 -75	450 Maximum
Class 3 or C	76 - 200	450 Maximum

Correction Factor

CORRECTION FACTOR FOR CALCULATING FLAME SPREAD INDEX

- If this total area (A_T) is less than or equal to 97.5 ft·min then
  The flame spread index shall be FSI = 0.515* A_T.
- If the total area (A_T) is greater than 97.5 ft·min then
  The flame spread index shall be FSI = 4900/ (195 - A_T).
  Here A_T represents Total Area i.e. $A_T = A_1 + A_2$
  A_1 = Area Under the curve where first peak is observed.
  A_2 = Area just above the curve in the line of First peak point.

CORRECTION FACTOR FOR CALCULATING SMOKE DEVELOPED INDEX

Smoke Developed (SD) is determined by dividing the total area under the obscuration curve by that of cement board and multiplying by 100. SD is then rounded to the nearest multiple of 5 if less than 200. SD values over 200 are rounded to the nearest multiple of 50.

Smoke Developed Index = Area under the Obscuration Curve × 100
Area under the Red Oak Curve

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Annexure A

Flame Spread Data

Time(minutes)	Distance (Feet)
1	Burner Flame
2	Burner Flame
3	Burner Flame
4	Burner Flame
5	Burner Flame
6	Burner Flame
7	Burner Flame
8	Burner Flame
9	Burner Flame
10	Burner Flame

Flame Spread data	
Calculated Flame Spread (CFS)	0
Flame Spread Index	0
Time to Ignition (sec)	-
Maximum Flame Spread (Ft)	0 ft.
Area under the Flame Spread Curve (Ft. Min)	0 ft. min.

Smoke Data	
Calculated Smoke Developed	436.9
Smoke Developed Index	**450**
Area under the Smoke Curve (Ft. Min)	322.77
Area under Red Oak Curve (Ft. Min)	73.87

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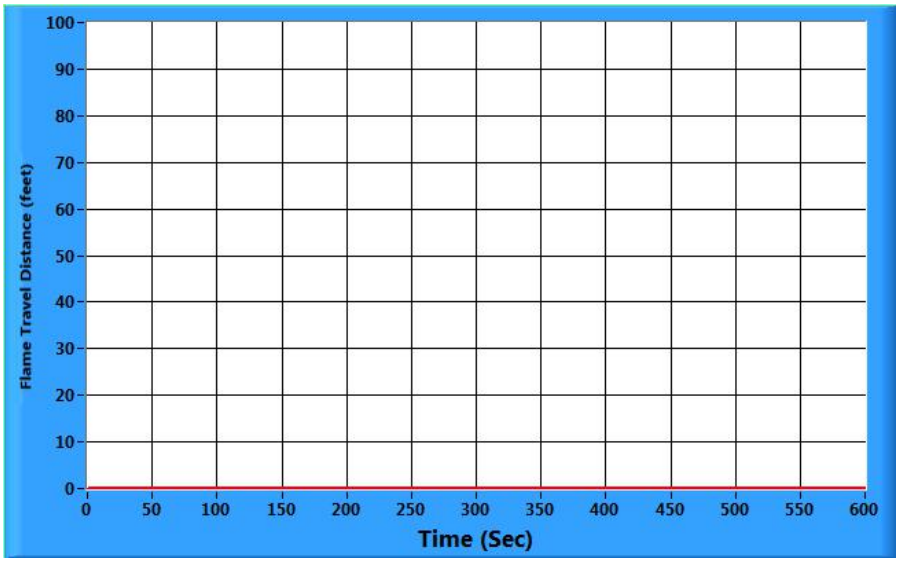
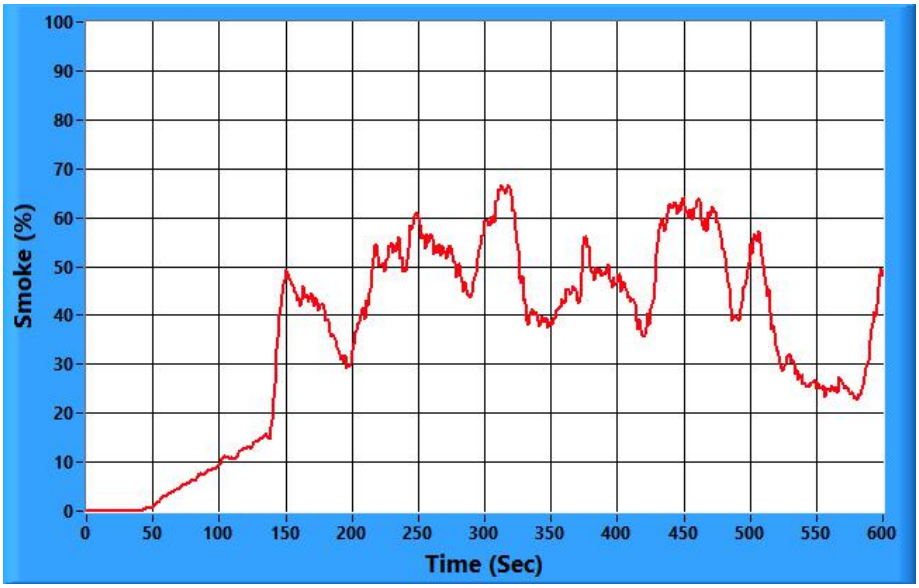
Annexure B

GRAPHS





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Photographs

Before Test

During Test

After Test

-- End of Test Report --

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