

**CPRI**

## **TEST REPORT**



## **Central Power Research Institute**

**(A Govt.of India Society,)  
P.B. No.8066, Sadashivanagar Post Office  
Prof. Sir.C.V. Raman Road,  
Bangalore - 560 080(INDIA)**

TEST REPORT

Test Report Number : CPRI/LRCABMISC19T0006 Dated: 10.01.2019

Name & Address of the Customer : M/s. Macoplast Pipe Industries,  
# 11, Site #1A, Kyalasanahalli Village,  
Bangalore East Taluk,  
Bangalore - 560 077  
Near Kothnur Police Station.

Name & Address of the Manufacturer : M/s. Macoplast Pipe Industries,  
# 11, Site #1A, Kyalasanahalli Village,  
Bangalore East Taluk,  
Bangalore - 560 077  
Near Kothnur Police Station.

Particulars of sample tested : Universal 25 mm Heavy FRLS UPVC Electrical  
Conduit Pipe

Condition of the Sample on Receipt : New

Type : Nil  
Description of test sample : Universal 25 mm Heavy FRLS UPVC Electrical  
Conduit Pipe  
Printing : UNIVERSAL ISI UPVC 25 mm HEAVY

Serial Number : Nil  
Number of samples tested : One  
Date(s) of Test(s) : 31.12.2018 to 04.01.2019  
CPRI sample code no : CDDMISC18S0060

Particulars of tests conducted : Smoke Density test

Test in accordance with standard/specification : ASTM-D-2843-2016

Sampling plan : Not applicable  
Customer's requirement : Nil  
Deviations if any : Nil

Name of the witnessing persons


Customer's representatives : None  
Other than Customer's representatives : None  
Test subcontracted with address of the laboratory : None

Documents constituting this report (in words)

Number of Sheets : Four  
Number of oscillograms : Nil  
Number of graphs : Nil  
Number of photos : Nil  
Number of Test Circuit Diagrams : Nil  
Number of Drawings : Nil

  
(R.ARUNJOTHI)  
TEST ENGINEER



  
(K.P.MEENA)  
JOINT DIRECTOR  
Approved By

# CENTRAL POWER RESEARCH INSTITUTE



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The FRLS UPVC Electrical Conduit Pipe is moulded into the required dimensions and the following test is carried out.

## TEST RESULTS

### SMOKE DENSITY TEST:

Test Method : As per ASTM-D-2843-2016

No. of specimen tested : Three

Sample Dimensions : Length: 25.4 mm, Width: 25.4 mm,

Conditioning : Samples were conditioned for 48 hours at 23±2°C & 50 ± 5% RH

Time in		Absorbance in percent			
Mts.	Secs.	Sample 1 (Thickness 6.0 mm)	Sample 2 (Thickness 6.0mm)	Sample 3 (Thickness 6.0 mm)	Average Absorbance in percent
00	15	8.4	8.1	10.5	9.00
00	30	42.2	46.7	46.7	45.20
00	45	59.7	62.2	61.2	61.03
01	00	71.0	73.7	74.3	73.00
01	15	79.7	74.4	79.2	77.77
01	30	81.6	76.4	80.2	79.40
01	45	81.9	80.4	82.5	81.60
02	00	82.2	81.9	84.6	82.90
02	15	84.2	84.4	87.4	85.33
02	30	86.1	86.5	91.3	87.97
02	45	89.4	87.2	92.3	89.63
03	00	90.8	89.7	91.9	90.80
03	15	93.7	91.3	92.1	92.37
03	30	94.5	92.4	94.9	93.93
03	45	94.7	93.2	94.8	94.23
04	00	93.4	94.5	93.4	93.77

Maximum smoke density in Percent light Absorption : 94.23 %

Area in percent under the light absorption

Time curve (Smoke density rating)

Observed : 74.44 %

Observation of time taken for sample to burst into flame : 15 seconds

Obscurement of 'EXIT' sign : 'EXIT' sign was visible throughout the test

*R. Arunjothi*  
(R.ARUNJOTHI)  
TEST ENGINEER

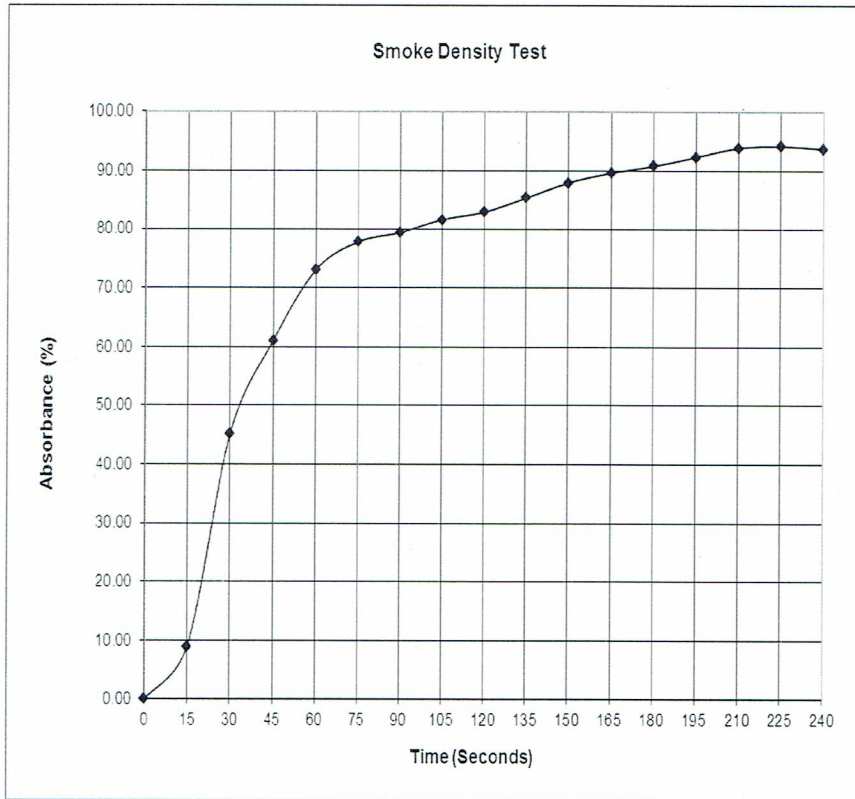


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TEST RESULTS



*R. Arunjothi*  
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NOTE

- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this test report in any form other than by complete set of the whole report and in the language written is not permitted without the written consent of CPRI.
- c) Any Correction/erasure invalidates the test report.
- d) NABL has accredited this laboratory as per ISO/IEC 17025-2005 standard, vide certificate no. TC-5452 for the tests carried out.
- e) Any anomaly/discrepancy in this test report should be brought to the notice of CPRI within 45 days from the date of issue.

*R. Arunjothi*  
(R.ARUNJOTHI)  
TEST ENGINEER