सेन्ट्रल इनस्टीट्यूट ऑफ प्लास्टिक्स इन्जीनियरिंग एण्ड टेक्नॉलाजी

(रसायन एवं पेट्रोरसायन विभाग रसायन एवं उर्वरक मंत्रालय, भारत सरकास)

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CENTRAL INSTITUTE OF PLASTICS ENGINEERING & TECHNOLOGY

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NABL
CERT No.
T-0828&0829

Plastics Testing Centre

No.: 0131647

Test Certificate

Date: 29.05.2018

Issued to: M/s.Tesla Electric & Engineering India Pvt. Ltd.,
#156, SVK Arcade, 4th Floor, 2nd Main Road,
East of NGEF Layout, Kasturi Nagar,
Bangalore-560043

Ref : Your Ltr. Nil dated : 11.05.2018 & 14.05.2018

TEST REPORT AS PER: IS: 9537(Pt. 3)-1983 with latest Amdt. REPORT NO: 1808632/2

PART A : PARTICULARS OF SAMPLE SUBMITTED

a) Name of the Sample	:	Rigid Plain Conduits of Insulating material for electrical installation
b) Grade/Variety/Type/Size/Class	:	25 mm UNIVERSAL HMS, Heavy (Plain ended)
c) Declared values, if any	:	Supplied at Work Site : APTIDCO Project by M/s. Macoplast Pipe Industries, Bangalore
d) Code No.	:	Nil
e) Batch No. and Date of Manufacture	:	Nil
f) Quantity	:	6 nos. x 3 mtr
g) Mode of Packing	:	HDPE Bag
h) Seal	:	Nil
i) Any other information	:	Samples received on 16.05.2018
j) Date of Initiation of Testing	:	16.05.2018
k) Date of Completion of Testing	:	28.05.2018

PART B : SUPPLEMENTARY INFORMATION

a) Reference to sampling Procedure	:	Nil
b) Supporting documents for the measurement taken and result derived	:	Nil
c) Deviation from the test method as prescribed in relevant work instructions, if any	:	Nil

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Continuation Sheet

REPORT No. 1808632/2 TEST RESULTS Page 2 of 3
PART – C (As per IS: 9537-1983 (Pt.3) with latest Amnd.)

Sample: PVC Conduit Pipe – 25 mm, Heavy

S.No	Clause	Test	Specified Requirement	Results obtained
1.	5	CLASSIFICATION		
	5.1	Classification of Conduits	Shall be classified according to mechanical properties (1)Light, (2) Medium, (3) Heavy	Heavy
1.1	6	MARKING		
	6.1	a) Manufacturer's name or trade mark	--	Available
		b) Nominal size of the conduit	--	25 mm
		c) Country of Manufacturer	--	India
		d) Classification	--	Available
1.2	6.2	Durability of the marking	Marking shall be durable and legible	Confirmed
2.	7	DIMENSIONS		
2.1	7.1	Diameter: (mm)		
		Outside Diameter	25.0	24.93
2.2		Tolerance on Outside Diameter	-0.4	-0.07
2.1.1		Inside Diameter (min) (mm)	20.6	21.0
2.1.2	7.1.1	Max , Min OD of the Conduits measured by Gauges	Fig.1 & Fig.2	Passed
2.1.3	7.3	Length of Conduit Pipe (mtr)	3.0 or 4.0 mtr	3.0
2.1.4	7.4	Uniformity of wall thickness (mm)	In no case shall the difference between the value measured and the average of twelve values obtained from three samples exceed 0.1+10%of average value.	0.11 Passed
3.	8.1	Construction	The inside and the outside surface of conduits shall be reasonably smooth and free from burrs, flash and similar defects ; in addition, the edge over which the conductor s or cable are likely to be drawn shall not damage the cable or conductor	Satisfactory

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Continuation Sheet

REPORT No. 1808632/2 TEST RESULTS Page 3 of 3
PART – C (As per IS: 9537-1983 (Pt.3) with latest Amnd)
Sample: PVC Conduit Pipe – 25 mm, Heavy

S.No	Clause	Test	Specified Requirement	Results Obtained
4.	9.2	Bending test	Shall show no cracks visible to normal or corrected vision without magnification.	Passed
5.	9.3	Compression test	a)The difference between the initial diameter and diameter of the *flattened sample shall not exceed 25% of the initial diameter* b) After removal of the force, the difference between initial diameter and the diameter of the flattened sample shall not exceed 10% of the initial diameter	9.93% Passed 2% Passed
6.	9.4	Impact test	Shall be no sign of disintegration, neither shall there be any crack *visible to the naked eye*	Passed
7.	9.5	Collapse test	The minimum internal diameter shall be checked with appropriate gauge and it shall be possible to pass this gauge through the conduit fixed to support.	Passed
8.	10.0	Resistance to Heat (mm)	Shall not exceed 2 mm	0.16
9.	11	Resistance to burning (sec)	Any flame shall have died out in *less than 30 sec after removal of the burner*	15 sec Passed
10.	12.1.1	Electrical Strength	No breakdown or flashover shall occur during the test	Passed
11.	12.1.2	Insulation Resistance (MΩ)	Shall not be less than 100 MΩ	118 Passed

PART D : REMARKS : NIL

NB : 1. The results related only to item s/samples tested.
2. The report shall not be reproduced in full/part without written approval of the laboratory.

AUTHORISED SIGNATORY