



भारत सरकार Government of India
राष्ट्रीय परीक्षण शाला (द.क्षे.)
NATIONAL TEST HOUSE (SR)
तरमणी, चेन्नई - 600 113. Taramani, Chennai - 600 113.
Phone : 22432374, 22431157 Fax : 22433158 email : nthsr@tn.nic.in

347263

परीक्षण प्रमाण पत्र

TEST CERTIFICATE

INTERIM/FINAL REPORT

परीक्षण प्रमाण पत्र सं. Test Certificate No NTH(SR)/EL(C)/2014/00192	जारी होने की तिथि Date of Issue 19/05/2014	कोड नं. Code No 1398920446941	पृष्ठ Page 1	पृष्ठों की संख्या No of Pages 2
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जिसे जारी करना है : ZENITH INDUSTRIAL RUBBER PRODUCTS PVT.LTD.
Issued To

पता : A-2,PAREKH MAHAL,VEER NARIMAN ROAD,MUMBAI-400020
Address

ग्राहक का सन्दर्भ सं एवं दिनांक : e-mail Date: 29/04/2014
Customer's Ref. No.

पंजिका सं एवं दिनांक : 00192/NTH(SR)/EL(C)/02/05/2014
Register No & Date

परीक्षण सामग्री का विवरण : Electrical Insulating Matting.
Description of Test Item

परीक्षण सामग्री का पहचान : Electrical Insulating Matting made of Elastomer.
Identification of Test Item
Class: 4 (Stated)
Size: 2mx1.2m

नमूना का विशिष्टि (यदि ही) : IEC: 61111, Edition 2.0 2009-04.
Product Specification (if any)

नमूना प्राप्ति की तिथि : 01/05/2014
Date of Receipt of the Test Item

कार्य सम्पादन की तिथि : From: 02/05/2014 To: 16/05/2014
Date(s) of Performance of Tests

व्यावहृत प्रणाली का पहचान : IEC: 61111, Edition 2.0 2009-04.
Method(s) used for Test

नमूना प्रक्रिया वही प्रासंगिक ही : Sample submitted by Customer.
Sampling Procedure where relevant

Tested By

V. Sivaguru

SO Electrical

Checked By

K. Jeyaraj

SO Electrical

Approved By

S.B. Nanda Kumar

Scientist-SC(Electrical)



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Sl. No.	Test Name	Test Result	Limit
1	Discrete Test	Results reported in annexure.	As per customer's specification

टिप्पणी
Note : Reported in annexure

कैफियत
Remarks : Results reported in annexure.

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SO Electrical

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1. Description of the sample :

- a. Nomenclature : Electrical Insulating matting made of Elastomer, Class 4
b. Size : 2m x 1.2 m, Thickness: Total: 5.5 mm, Base: 5mm
c. Quantity : 2 Number.

As requested the sample has been subjected to IEC 61111 Edition 2.0 2009-04 with the results noted below.

2. Visual Inspection (Cl. 5.2)

- a. Classification : Class 4
b. Composition : Elastomer, with slip resistance both sides
c. Dimensions : Length: 2m, Breadth: 1.2m, Thickness: Total: 5.5 mm, Base: 5mm
d. Workmanship and finish : Generally Satisfactory, no harmful physical irregularities found on both surfaces

3. Tests	Observed	Specified
a. Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N	Satisfactory	70 (Min)
i. Side 1	82	
ii. Side 2	80	

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Scientific Officer (Elect.)

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b. Voltage Proof test (as per cl. 5.6.2.2.2 of the specification) Mask with picture frame made up of insulating material with a opening of 762x762mm in the middle and kept on a earthed metal plate. The opening was filled by a conductive material. The sample kept on this arrangement and top electrode of size 762mm X 762mm place above this. (such arrangement shown in Picture 1) An ac voltage of 40kV (rms) at 50 Hz applied and kept constant for 3 minutes.	Observed	Specified
	Withstood the test satisfactorily	Shall with stand without breakdown or flashover
c. Voltage Withstand Test (as per cl. 5.6.2.3 of the specification) Electrode: 25mm (Top) x 75mm (Bottom) An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 50kV.	Withstood the test satisfactorily	Shall with stand without breakdown or flashover
d. Ageing test (as per cl. 5.7 of specification) Sample conditioned at 70°C±2°C for 168 hours. Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N	Satisfactory	(Minimum 80% of puncture resistance before ageing)
i. Side 1	74	65.6 (Min)
ii. Side 2	71	64 (Min)
e. Flame retardance test (as per cl.5.8.1 of the specification) Application of flame 10s and after withdrawal, the propagation of flame was observed for 55s and it shall not reach any point of 50mm diameter.	Satisfactory 38mm	Propagation of flame shall not reached 50 mm diameter of circle

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	Observed	Specified
f. Low Temperature folding test (as per cl. 5.8.2 of the specification) Sample conditioned at (-)25±3°C for 4 hours. After this the test piece folded at the midpoint and placed between two polyethylene plates and subjected to a force of 100N for 30s. i. Visual inspection	Satisfactory as no crack or tear break observed	Shall not show crack or tear break observed
ii. Voltage Withstand Test (An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 50kV).	Withstood the test satisfactorily	Shall with stand without breakdown or flashover
g. Acid resistance (as per cl. 5.9 of the specification) Sample shall be immersed in Sulfuric acid solution at 23°C±2°C for 8h. after this rinsed with water and dried for 2h at 70°C.		
Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples. Puncture resistance in N		(Minimum 75% of puncture resistance before ageing)
i. Side 1	Satisfactory	61.5 (Min)
ii. Side 2	68	60 (Min)
iii. Voltage Withstand Test (An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 50kV).	Withstood the test satisfactorily	Shall with stand without breakdown or flashover

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	Observed	Specified
h. Oil resistance (as per cl. 5.10 of the specification) Sample shall be immersed in Oil 23°C±2°C at 50% RH for 3h. after this rinsed with water and dried for 24h at 70°C.		
Mechanical Puncture resistance (as per cl. 5.5.2 of the specification) Test carried out on both sides of the sample on two samples.		
Puncture resistance in N		(Minimum 75% of puncture resistance before ageing)
i. Side 1	Satisfactory	61.5 (Min)
ii. Side 2	66	60 (Min)
iii. Voltage Withstand Test (An ac voltage at 50 Hz applied with a rate of rise of voltage 1000V/sec. until it reaches 50kV).	63 Withstood the test satisfactorily	Shall with stand without breakdown or flashover

Note: The average ambient condition during the above test was as follows:-

Temperature : 25±2°C
Relative Humidity : 60 to 70 %

###END OF TEST CERTIFICATE###

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