

Test Report Issue To:
WallMax India Enterprises Pvt Ltd.
12/6 Golden Peacock Complex,
Main Mathura Road,
Faridabad-121003

Test Report No : I220926001-1

Date of Issue: 13/10/2022



Sample Booking/Receipt : 26/09/2022

Date of Start of Testing: 01/10/2022

Date of Completion of Test: 04/10/2022

Customer Relationship Number :

A1120126

Sample Description :

Wallmax EPDM Rubber

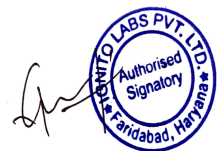
Kind Attention: Mr. Manoj Kumar

E-Mail: manoj.kumar@wallmax.in

Contact No: 9212548272

Customer Reference Number : PO/SEP/2223/00028

Sample Drawn By : Test Sponsor



Kaushal Kumar Thakur
Reviewed & Authorized By

This is Digitally Signed Report and hence doesn't require Physical Signature

1. INTRODUCTION

Determination of compliance of **Wallmax EPDM rubber** by perform various test referred by **R22** and **R23** Category of **EN 45545-2:2020**; Requirements for fire behavior of materials and components

2. TEST METHOD & REFERENCES

EN 45545-2:2020; Requirements for fire behavior of materials and components

EN ISO 5659-2:2017; Determination of optical density by a single-chamber test

ISO 5660-1:2015; Heat Release rate (cone calorimeter method) and smoke production rate (dynamic measurement)

ISO 5658-2:2006; Lateral spread on building and transport products in vertical configuration.

T11.02 of EN 45545-2:2020; Determination of Conventional Index of Toxicity

3. SPECIMEN DETAIL

The testing laboratory has not been involved in the selection of the specimen. All details given below are declared by test sponsor.

Name of Product:	Wallmax EPDM Rubber
Color:	Black
GSM/Density:	Not Declared by test sponsor
Thickness:	5mm

4. CONDITIONING


The specimens were conditioned at 23±2°C and 50±5% RH till constant mass.


5. TEST PROCEDURE AND RESULT

5.1 Parameter: Oxygen Index

Test Method: T01 (EN ISO 4589-2)

1 specimen of size 140mm in length, 52mm in width and 5mm in thickness has been placed in sample holder. Desired oxygen percentage has been introduced in the test chimney by proper mixing of oxygen and nitrogen gas. On achieving the desired oxygen percentage in test chimney, specimens were ignited for up to 30 seconds using pilot flame. Burning period and Length of burnt portion is recorded. In case of no ignition, oxygen content is increased in the chimney until the ignition occurs.


Anshul Kumar
(Tested By)



ULR No: TC1038322000000105F



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A. Preliminary oxygen concentration

Oxygen Concentration (%)	22	24	26	28	30	34	36	38	37
Burning Period(s)	0	0	0	0	0	0	0	>180	>180
Length Burnt(mm)	-	-	-	-	-	-	-	43	53
Response ('X' or 'O')	O	O	O	O	O	O	O	X	X

B. Determination of the Oxygen Index value

Successive change in oxygen concentration, d: 0.2%

	N _T series measurement									
	N _L series measurement					C _i				
Oxygen Concentration (%)	36.2					36.2	36	36.2	36	36.2
Burning Period(s)	>180					>180	28	>180	35	>180
Length Burnt(mm)	>50					>50	5	>50	3	48
Response ('X' or 'O')	X					X	O	X	O	X
	Column (2,3,4 or 5):1					Row (1 to 16):6				
	k value from Table: -0.50									


Oxygen Index, OI = 36.1 %

5.2 Parameter: D_s Max & CITg

Test Method: T10.03 (EN ISO 5659-2: 25 kW/m²) & T11.02 (EN 17084 method 1:25 kW/m²)

1 specimen of size 75mm in length, 75mm in width and 2mm in thickness has been placed 25 mm below the irradiance- controlled system which is set at an irradiance of 25 kW/m² with a pilot burner above the top of retainer frame in a Smoke density chamber. Light Transmittance has been set to 100%. Burning of specimen reduces the percentage of light transmittance, which give rise in density of smoke and related parameters. Maximum specific optical density D_s Max. and CITg were recorded. Test for 2 more specimens performed in same manner and results were recorded.

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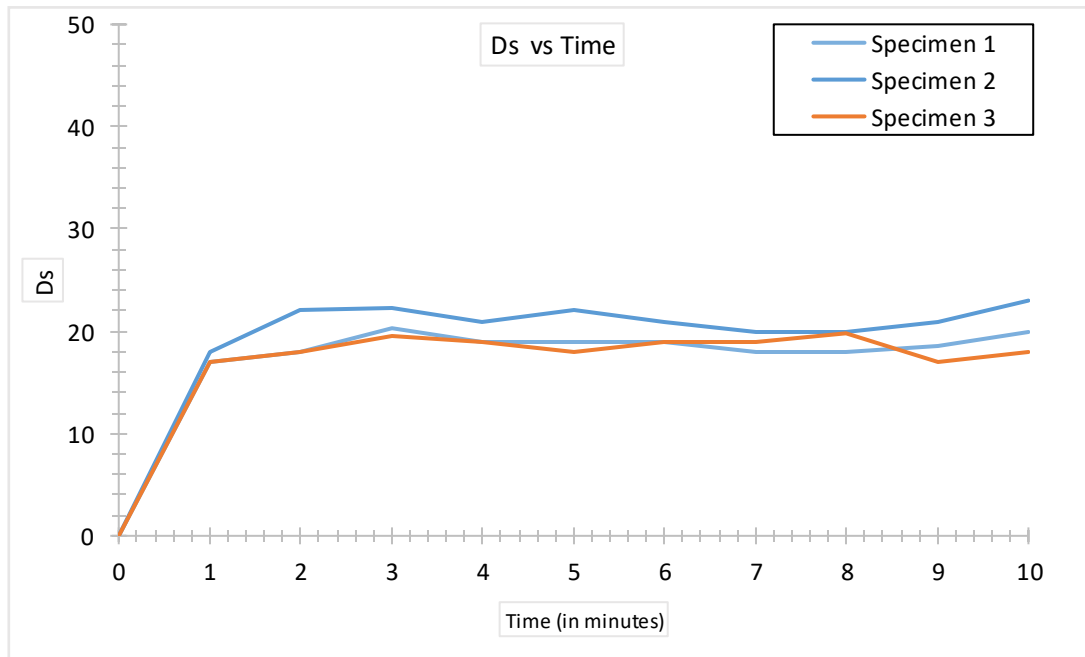

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Wire Grid Used (Yes/No)	No
Heat Flux, in kW/m ²	25
Separation, in mm	25

Parameter	Specimen			Mean
	1	2	3	
Maximum Specific Optical Density, D _s Max.	20.3	22.3	19.5	20.7
Conventional Index of Toxicity, CITg 240 s	0.21	0.22	0.21	0.21
Conventional Index of Toxicity, CITg 480 s	0.35	0.39	0.36	0.37



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6. CONFORMITY

Tested specimen meets the requirements of **R23 HL3 and R22 HL3 category of EN 45545-2:2020.**

Parameter	Test Method	Requirements of R23, HL3 of EN 45545-2:2020	Requirements of R22, HL3 of EN 45545-2:2020	Observed Results	Compliance
Oxygen Content, in %	T01 (EN ISO 4589-2)	Minimum 32	Minimum 32	36.1	Compliant
Maximum Specific Optical Density, D _s Max	T10.03 (EN ISO 5659-2: 25 kW/m ²)	Maximum 300	Maximum 150	20.7	Compliant
CIT _g	T11.02(EN 17084 Method: 25 kW/m ²)	Maximum 1.5	Maximum 0.75	0.37	Compliant

Classification Achieved:

R22 HL3 and R23 HL3 OF EN 45545-2

7. LIMITATION

The results only relate to the behavior of the specimen of the element of construction under the particular conditions of test; they are not intended to be the sole criteria of accessing the potential fire performance of the element in use nor do they reflect the actual behavior in fires.

8. PHOTOS




Sample Before Test (ISO 5659-2)



Sample After Test (ISO 5659-2)

-----End of Test Report-----

Anshul Kumar
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Terms & Condition:

- The results are related only to the items Tested
- Total Liability of our Laboratory is limited to the invoiced Amount. No Liability will be accepted after Sample is taken back
- The Sample Description is given "As desired by the customers". Sample not drawn by us & Analysis Conducted on Received sample unless specified otherwise.
- Retained sample will be destroyed after 30 days from the date of issue of the test report unless instructed otherwise.
- Any Complaints or Retest request should be communicated within 15 days from the issue of the Test report.
- Test Report shall not be reproduced except in full, without Written approval of the Laboratory
- The Test report is not to be reproduced wholly or in parts & cannot be used as an evidence in a court of law & shall not be used in advertising media without our permission in writing.

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