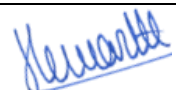



TEST REPORT

Page 1 of 3

1.	Test Report No.	:	ERL/2024-25/3000036616B	Date: 24/05/2024
2.	SO No.	:	3000036616	
3.	Customer's Name	:	4MANN INDUSTRIES PRIVATE LIMITED	
4.	Customer's Address	:	404/405, Ashok Premises CSL, Mogra Village, Old Nagardas Road Nicholas wadi, Andheri East, Mumbai Suburban Mumbai Suburban Maharashtra -400069	
5.	Letter reference and date	:	E-mail dated:17-APR-2024	
6.	Kind Attention	:	Mr. Prashant Sawant Asst. Manager, Purchase	
7.	Service requirements	:	Testing of material to determine Vertical Burning Rate of Materials as per IS: 15061-2002 Clause 3.3 Annex B and Melting Behaviour as per IS: 15061-2002, Clause 3.4, Annex C.	
8.	No. of Samples	:	01.	
9.	No. of pages	:	03.	
10.	Test Report Prepared By	:		 H. L. KHANDASKAR CHEMIST
11.	Test Report Verified By	:		 Ms. R. R. NAIK MANAGER
12.	Test Report Approved By	:		M. A. BAWASE GENERAL MANAGER

Place of Issue: PUNE

Date of Issue: May 24, 2024

DISCLAIMER:

This test report pertains only to the components / parts / assemblies / vehicles etc. actually tested at ARAI in the presented condition based on the documents / information produced / submitted by the customer. The issuance of this test report alone does not indicate any measure of approval, certification, supervision, control of quality surveillance by ARAI of the product. No extract, abridgement or abstraction from this test report shall be published or used to advertise the product without the written consent of the Director, ARAI, who reserves the absolute right to agree or reject all or any of the details of any items of publicity for which consent may be sought. ARAI is in no way responsible for any misuse of copying of any design / type / system in connection with entire vehicle / components / parts and assemblies. Breach of any statutory provision of Indian laws or laws of other countries, will be the sole responsibility of the customer and ARAI shall not be liable for any claims or damages, made by the party, whatsoever, the customer shall alone be liable for the same, and undertakes to indemnify ARAI in this regard. Further, the ARAI has the right to initiate cancellation / withdrawal of the certificate issued, in case of any fraud, misrepresentation, when it surfaces and comes in the knowledge of ARAI. **The appropriate local courts at Pune shall have the jurisdiction in respect of any dispute, claim or liability arising out of this report.**

ARAI will preserve the tested samples for a period of **ONE** month from the date of issue of the test report. Queries, if any, regarding the sample or the test report, will be entertained / attended to in this stipulated period of ONE month only. Further, all the related test standards, drawings supplied by customer, letters, e mails etc. exchanged with respect to this test work will be preserved in our custody for a span of only **THREE** years from the date of the test report.

TEST REPORT

Customer's Name	:	4MANN INDUSTRIES PRIVATE LIMITED
Service requirement	:	Testing of material to determine Vertical Burning Rate of Materials as per IS: 15061-2002 Clause 3.3 Annex B and Melting Behaviour as per IS: 15061-2002, Clause 3.4, Annex C.
Sample Received date	:	17/05/2024
Condition of Sample	:	Prepared Sample received in good condition
Sampling	:	Sampling done by customer
Date Sampled	:	Not applicable

1.0 Sample Details as submitted by customer:		
Material Manufacturer's Name	:	4MANN INDUSTRIES PRIVATE LIMITED
Material Grade	:	4MANN – FR
Material Type	:	FR GRADE
Component Part No. and Batch No.	:	MA-908 / MILKY WHITE
Identification Code	:	MA-908 / MILKY WHITE

2.0 Vertical Burning Rate as per IS: 15061- 2002 Clause 3.3 Annex B.

2.1 Observation Table:

	Temperature (°C) Max to Min	Relative Humidity (%) Max to Min	Soak duration (hrs)
Soaked condition	27	65	48 hrs
Test condition	27 to 26	67 to 65	Date of test: 24/05/2024
Nature of sample	Composite, Isotropic	Test specimen Dimension	Average: 560 X 170 X 4.0 mm

Sr. No.	Test Description	Specified Requirement	Observations				
1.	Vertical Burning Rate, mm/minute as per IS: 15061-2002, Clause 3.3, Annex. B.	The result of the test shall be considered satisfactory if, taking the worst test results into account, the vertical burning rate is not more than 100 mm/min.		Burnt Distance, mm	Duration of combustion, sec	Burning rate, mm/min	
			Test Piece 1	-	-	-	The Flame extinguished before reaching severance of the First Marker Thread.
			Test Piece 2	-	-	-	
			Test Piece 3	-	-	-	
			(Please refer typical photograph)				
2.	Remark	Sample under test meets Vertical Burning Rate test requirement when tested as per; IS: 15061- 2002; Clause 3.3 and Annex B.					

Typical Photograph

Before test



After test



Test Report Prepared By

H. L. Khandaskar

H. L. KHANDASKAR
CHEMIST

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Test Report Verified By

Ms. R. R. Naik

Ms. R. R. NAIK
MANAGER

3.0 Melting Behavior as per IS 15061- 2002 Clause 3.4 Annex C.

3.1 Observation Table:

	Temperature (°C) Max to Min	Relative humidity (%) Max to Min	Soak duration (hrs)
Soaked condition	27	65	48 hrs
Test condition	27 to 26	67 to 65	Date of test: 24/05/2024
Nature of sample	Composite, Isotropic	Test specimen Dimension	Average: 70 X 70 X 4.0 mm

Sr. No.	Test Description	Specified Requirement	Observations				
			Criteria	Test Piece 1	Test Piece 2	Test Piece 3	Test Piece 4
1.	Melting Behaviour as per IS: 15061-2002, Clause 3.4, Annex C.	The result of the test shall be considered satisfactory if, taking the worst test results into account, no drop is formed which ignites the cotton wool.	The fall of drops, if any, whether flaming or not;	No	No	No	No
			Ignition of the cotton wool has taken place	No	No	No	No
			(Please refer Typical photograph)				
2.	Remark	Sample under test meets Melting Behavior test requirement when tested as per IS: 15061- 2002; Clause 3.4 and Annex C.					

Typical Photograph

Before test




After test



Test Report Prepared By

Test Report Verified By


H. L. KHANDASKAR
CHEMIST


Ms. R. R. NAIK
MANAGER

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