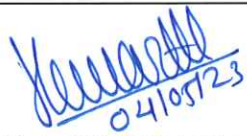





**TEST REPORT**

Page 1 of 4

1. Test Report No.	: ERL/2023-24/3000029380	Date: 04/05/2023
2. SO No.	: 3000029380	
3. Customer's Name	: JINDAL PETRO FOAM	
4. Customer's Address	: NARAINGARH ROAD, VILLAGE MANDHOURE AMBALA, HARYANA-134003	
5. Letter reference and date	: E-mail Dated:15-APR-2023	
6. Kind Attention	: Mr. Sanjay Kumar	
7. Service requirements	: Horizontal Burning Foamed Material Test; HF-1/HF-2 as per UL 94 Clause 12.	
8. No. of Samples	: 01.	
9. No. of pages	: 04.	
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
<b>Place of Issue: PUNE</b>		<b>Date of Issue: May 4, 2023</b>
<p><b>DISCLAIMER:</b></p> <p>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. <b>The appropriate local courts at Pune shall have the jurisdiction in respect of any dispute, claim or liability arising out of this report.</b></p> <p>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.</p>		

## TEST REPORT

Customer's Name	:	JINDAL PETRO FOAM
Service requirements	:	Horizontal Burning Foamed Material Test; HF-1/HF-2 as per UL 94 Clause 12.
Sample Received date	:	25/04/2023
Condition of Sample	:	Prepared Sample received in good condition
Sampling	:	Sampling done by customer
Date Sampled	:	Not applicable

<b>1.0 Sample Details as submitted by customer:</b>		
Material Manufacturer's Name	:	JINDAL PETRO FOAM, AMBALA CITY
Material Grade	:	FR GRADE
Material Type	:	PU FOAM
Drawing No	:	1 M * 1 M Size
Other information	:	PU FOAM

**2.0 Requirement as per; Clause 12.1.6 for HF-1 and HF2 Class:**

Criteria	HF-1 Class	HF-2 Class
	Requirement	
After flame time	Four out of a set of Five specimens $\leq$ 2 seconds. One out of a set of five specimens $\leq$ 10 seconds.	
Afterglow time for each individual specimen	$\leq$ 30 s	
Cotton indicator ignited by flaming particles or drop	No	Yes
Damaged length for each individual specimen	< 60 mm	

- Afterflame : Persistence of flaming of a material, after the ignition source has been removed.
- Afterflame Time: The length of time for which a material continues to flame, under specified conditions, after the ignition source has been removed.
- Flame Application time: 60 Seconds

Continued on next page.....

**3.0 Observation Table as per UL 94 clause 12:**

Date of testing	:	04/05/2023
-----------------	---	------------

**3.1 Preconditioning:** Specimens are preconditioned at  $23 \pm 2^{\circ}\text{C}$  and  $50 \pm 5\%$  relative humidity for a minimum of 48 hours

Sr. No.	Test Parameter	Observations				
		Test Specimen No.				
		1	2	3	4	5
1.	After flame time, in seconds	0	0	0	0	0
2.	Afterglow time for each individual specimen, in seconds	0	0	0	0	0
3.	Cotton indicator ignited by flaming particles or drop	No	No	No	No	No
4.	Damaged length for each individual specimen, in mm	25	26	24	25	24
<b>(Please refer photograph at Annexure I)</b>						

**3.2 Preconditioning:** Specimens are preconditioned at  $70 \pm 1^{\circ}\text{C}$  for period of 168 hours and then cooled in the desiccators for at least 4 hours at room temperature, prior to testing.

Aging start date: 27/04/2023

Aging End date: 04/05/2023

Sr. No.	Test Parameter	Observations				
		Test Specimen No.				
		1	2	3	4	5
1.	After flame time, in seconds	0	0	0	0	0
2.	Afterglow time for each individual specimen, in seconds	0	0	0	0	0
3.	Cotton indicator ignited by flaming particles or drop	No	No	No	No	No
4.	Damaged length for each individual specimen, in mm	30	25	29	30	35
<b>(Please refer photograph at Annexure I)</b>						

<b>Remark</b>	Sample under test <b>meets</b> HF-1 Class Requirement as per UL 94 Clause 12.1.6.
---------------	---

Test Report Prepared By

Test Report Verified By

*H. L. Khandaskar*  
 04/05/23

*Ms. R. R. Naik*  
 04/05/2023

H. L. KHANDASKAR  
 CHEMIST

Ms. R. R. NAIK  
 MANAGER

G:\DeptData\ERL\ERL\_Data\APR2023\_MAR2024\FIammability\SO 29380\_Jindal\Main Test Report\SO 29380.docx

---End of Test Report---



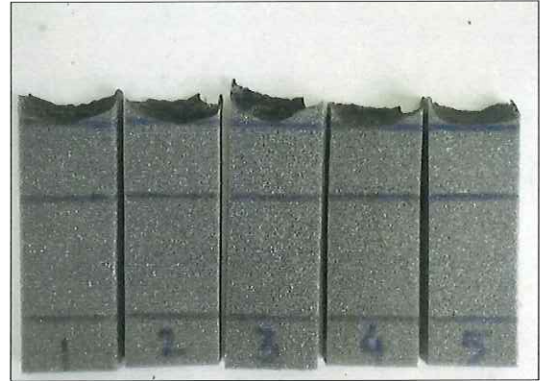
## ANNEXURE I

1. Test photograph of test specimens tested as per Sr. No. 3.1

**Before Test**



**After Test**



2. Test photograph of test specimens tested as per Sr. No. 3.2

**Before Test**



**After Test**



---X---X---