

LAB LOCATION: NOIDA-INDIA
REPORT NUMBER: 78124-120723REVISED1

ISSUE DATE: January 07, 2025
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Applicant : LEETHA PACK PVT LTD
Address : MAJOR INDUSTRIAL ESTATE, SOUTH KALAMASSERY, COCHIN 683104 – KERALA INDIA
Tel : 9947259888 / 9947258333
E-mail : akhil@leetha.com, sales@leetha.com
Contact Person : MATHEW JACKSON
Sample Description : AQUEOUS COATED PAPER CUPS
Buyer : /
SKU Number : /
Style Number : /
Manufacture : LEETHA PACK PVT. LTD.
No of sample submitted : 51pcs
Color : /
PO Number : /
Country of Origin : INDIA
Country of destination : EUROPE
End Use : HOT AND COLD
Date of Submission : December 20, 2024
Test Performance Dates : December 20, 2024 to January 07, 2025

Photo of Submitted Sample



78124-120723

For and on behalf of
Modern Testing Services (India) Ltd.



Raj Kumar
Asst. Program Manager – Hardlines

For and on behalf of
Modern Testing Services (India) Ltd.



Jeetesh Kumar Sharma
(Lab Supervisor)

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TEST RESULT SUMMARY	
Test Requested	Results
Specific Migration of Heavy Metals – European Commission Regulation (EU) No. 10/2011 and Its Amendment Regulation (EU) 2020/1245	PASS (See Table #01)
Overall Migration Test – European Commission Regulation (EU) No. 10/2011 and Its Amendment Regulation (EU) 2020/1245	PASS (See Table #02)
Specific Migration of Acrylic Acid (EU) No. 10/2011 and Its Amendment.	PASS (See Table #03)
Specific Migration of Methacrylic acid (EU) No. 10/2011 and Its Amendment.	PASS (See Table #04)
Specific Migration of Primary Aromatic Amine (PAA) Releases - European Commission Regulation (EC) No. 10/2011	Not Applicable
Sensory Test (Odour and Taste) – Test Specification(s) / Regulation(s): Council of Europe Resolution AP (2002) 1/Policy Statement on paper and board materials and articles intended to come into contact with foodstuffs and Framework regulation (EC) No 1935/2004	PASS (See Table #05)

REMARK

- 1- The listed test is conducted as per vendor's request.
- 2- This report is generated in our local format and is for vendor's reference only.
- 3- Specific Migration of Primary Aromatic Amine (PAA) is not applicable on this product.
- 4- SM of Acrylic Acid and SM Methacrylic acid testing has been subcontracted to ISO/IEC 17025 accredited Eurofins China lab.

REVISED1 PROPERTY:

This Report cancels and supersedes the Report No.78124-120723 dated January 07, 2025 issued by Modern Testing Services (India) Pvt. Ltd. This report has been revised to include the Sensory Test (Odour and Taste) as per agency request.

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COMPONENT BREAKDOWN LIST:

Test Item	Component Description
A1	Inside coating on paper cup
A2	Paper cup

Table #01
Specific Migration of Heavy Metals – European Commission Regulation (EU) No. 10/2011 and Its Amendment Regulation (EU) 2020/1245

Test Condition: 3% Acetic Acid, 70° C, 2hrs

Elements	Limit	A1
		Result (mg/kg)
		1 st Migration
Aluminium	1	<1
Antimony	0.04	<0.04
Arsenic	ND(0.01)	<0.01
Barium	1	<1
Cadmium	ND (LOD 0.002)	<0.002
Chromium	ND(0.01)	<0.01
Cobalt	0.05	<0.05
Copper	5	<5
Iron	48	<48
Lead	ND(0.01)	<0.01
Lithium	0.6	<0.6
Manganese	0.6	<0.6
Mercury	ND(0.01)	<0.01
Nickel	0.02	<0.02
Zinc	5	<5
Europium*	0.05	<0.05
Gadolinium*	0.05	<0.05
Lanthanum*	0.05	<0.05
Terbium*	0.05	<0.05
*Sum of all lanthanide substances	0.05	<0.05
Conclusion		PASS

LOD: specified Limit of Detection.

Method: EN 13130-1: 2004. The heavy metals content was determined by Inductively Coupled Plasma Mass Spectrometer.

Remark: 1. According to European Commission Regulation (EU) No. 10/2011, the selection of test condition and food simulants should be based on Article 18 of the Regulation as from 1 January 2016.

 Note: mg/kg = milligram per kilogram
 "<" = less than

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Table #02
Overall Migration Test – European Commission Regulation (EU) No. 10/2011 and Its Amendment Regulation (EU) 2020/1245

Simulant Used	Unit	Result	Limit	Conclusion
		A1		
		1 st migration		
3% Acetic Acid (70° C, 2hrs)	mg/dm ²	8.34	1. Shall not exceed 10 mg/dm ² 2. The migration value for each occasion must not be higher than the value in the preceding migration test	PASS
10% Ethanol (70° C, 2hrs)	mg/dm ²	8.7	1. Shall not exceed 10 mg/dm ² 2. The migration value for each occasion must not be higher than the value in the preceding migration test	PASS
Iso-octane (38° C, 30Min.)	mg/dm ²	<5	1. Shall not exceed 10 mg/dm ² 2. The migration value for each occasion must not be higher than the value in the preceding migration test	PASS

Method: EN 1186-1:2002, EN 1186-2: 2022, EN 1186-3:2022

- Remark: 1. According to European Commission Regulation (EU) No. 10/2011, the selection of test condition and food simulants should be based on Article 18 of the Regulation as from 1 January 2016.
2. Material or article with a mean overall migration result that exceeds the overall migration limit by an amount not exceeding the analytical tolerance, shall be deemed to be in compliance with the overall migration limit.

Note: “<” = less than
 mg/kg = milligram per kilogram
 % w/w = percent weight by weight
 mg/dm² = milligram per square decimetre

Table #03
Specific Migration of Acrylic Acid (EU) No. 10/2011 and Its Amendment

Test Condition: 3% Acetic Acid, 70° C, 2hrs

Simulant Used	Unit	Result	Detection limit	Limit	Conclusion
		A1			
3% Acetic Acid	mg/kg	ND	0.5	6	PASS

Note: - 1 mg/kg = 1 ppm = 0.0001%
 - °C = degree Celsius
 - N.D. = Not Detected

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Table #04

Specific Migration of Methacrylic acid No. 10/2011 and Its Amendment

Test Condition: 3% Acetic Acid, 70° C, 2hrs

Simulant Used	Unit	Result	Detection limit	Limit	Conclusion
		A1			
3% Acetic Acid	mg/kg	ND	0.5	6	PASS

Note: - 1 mg/kg = 1 ppm = 0.0001%
 - °C = degree Celsius
 - N.D. = Not Detected

Table #05

Sensory Test (Odour and Taste) – Test Specification(s) / Regulation(s): Council of Europe Resolution AP (2002) 1/Policy Statement on paper and board materials and articles intended to come into contact with foodstuffs and Framework regulation (EC) No 1935/2004

Parameter	Food Stimulant	Result	Maximum Permissible Limit
		A2	
Odour transfer into foodstuff through stimulant	Distilled water	0	2.5 Scale
Conclusion		PASS	-

Note:
 (Intermediate grades are allowed)
 0 = no perceptible difference in odour;
 1 = just perceptible difference in odour (still difficult to define);
 2 = slight difference in odour;
 3 = marked difference in odour;
 4 = strong difference in odour.
 - Test method adopted: DIN EN 1230-1:2010.

Parameter	Food Stimulant	Result	Maximum Permissible Limit
		A2	
Taste transfer into foodstuff through stimulant	Distilled water	0	2.5 Scale
Conclusion		PASS	-

Note:
 (Intermediate grades are allowed)
 0 = no perceptible difference in taste;
 1 = just perceptible difference in taste (still difficult to define);
 2 = slight difference in taste;
 3 = marked difference in taste;
 4 = strong difference in taste.
 - Test method adopted: DIN EN 1230-2:2018.

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NOTE:

Test uncertainties not reported are at client's disposal, for those in which it is possible to evaluate or estimate the test uncertainty. The statement of conformity is based on a 95% coverage probability for the expanded uncertainty of the measured result (guard band):

Rule 1:

For any requirement state to be "Maximum"

PASS - The measured result is below a specification limit minus guard band.

INCONCLUSIVE - The measured result is inside the guard band and below the specification limit and the measured result is above the specification limit but below the specification limit added to the guard band.

FAIL - The measured result is above a specification limit added to the guard band.

DATA – There is no specification limit required which is not possible to state the conformity.

Rule 2:

For any requirement state to be "Minimum"

PASS - The measured result is above a specification limit plus guard band.

INCONCLUSIVE- The measured result is inside the guard band and above the specification limit and the measured result is below the specification limit but above the specification limit added to the guard band.

FAIL - The measured result is below a specification limit minus guard band.

DATA – There is no specification limit required which is not possible to state the conformity.

Rule 3:

For any requirement state to be "a range (Between Upper to Lower specification limit)"

PASS - The measured result is within a range of upper and lower acceptance limit.

INCONCLUSIVE- The measured result is inside the guard band at either side of specification limits

FAIL - The measured result is outside a specification limit minus/added to the guard band.

DATA – There is no specification limit required which is not possible to state the conformity.

Rule 4:

For any test based on subjective grading of results by using 9-point scale

PASS - The measured result is above specification limit.

FAIL - The measured result is below a specification limit.

DATA – There is no specification limit required which is not possible to state the conformity.

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Note:

If there is question or concern regarding the above results, please contact the appropriate lab person below:

Technical question & concern: Sunit Raghav
Deputy Business Unit Manager
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Any complaint and QA concern: Shristi Sachan
Quality Assurance
shristi.sachan@xoin.eurofinsasia.com

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******End of Test Report******