

## SHELF LIFE STUDY REPORT

Reference Number : EQNX:001:LAB:F:24:12:20196

### **PARTICULARS OF SAMPLE ANALYSED**

Client Name: PVR Flavourworks LLP.

Address: Plot No. 71 & 72, Phase - IV, IDA Cherlapally City: Hyderabad State: Telangana ZipCode: 500051.

Contact Person: Alluri Varun Varma Manufacturing Date: 16-Dec-24

Sample Name: Palak Dal Date of Receipt : 23-Dec-24

Batch No : - Storage Condition: Acceleration (38°C & 90% RH)

Packaging Material: Laminated Pouch Date of Report: 05-Mar-25

### **INTRODUCTION**

The shelf life of a food is the time period within which the food is safe to consume and/or has an acceptable quality to consumers. By performing shelf life analysis; one can define accurate dates for products, ensuring that the quality remains acceptable and safe for consumers.

Shelf life depends on physical, microbiological and chemical processes taking place in the product when stored under recommended condition. Chemical changes include oxidation of food, change and loss in colour, change in pH, enzymatic deterioration. Physical tests assessed are moisture content, textural changes, breakage or clumping of food. Microbial assessment for absence of pathogenic microorganism as per regulatory standards is carried out. Apart from microbial and chemical shelf life of food products, sensory aspects of the food products like its flavor, texture and appearance for example play a vital role in consumer acceptability.

**Your Testing and Auditing Partner**

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Mfg. Date : 16-Dec-24

#### RESULTS OF ANALYSIS

Tests	Date of analysis			23-Dec-24	20-Jan-25	03-Feb-25	24-Feb-24	Specified Limits
	Phase	Units	Method	A Immediately after receiving - Zero time	B After 0.2 months in room conditions and 3.8 weeks in accelerated conditions	C After 0.2 months in room conditions and 5.8 weeks in accelerated conditions	D After 0.2 months in room conditions and 8.8 weeks in accelerated conditions	
MICROBIOLOGICAL	Total viable count	cfu/g	IS 5402 (I) : 2021	8.6 x 10 <sup>2</sup>	9.3 x 10 <sup>2</sup>	2.4 x 10 <sup>3</sup>	3.9 x 10 <sup>3</sup>	*Max 10 <sup>5</sup>
	Coliform	cfu/g	IS 5401 (I) :2012 Reaffirmed 2018	<10	<10	<10	<10	*Max 10 <sup>2</sup>
	E coli	/g	IS 5887 (I) :1976 Reaffirmed 2018	Absent	Absent	Absent	Absent	Absent
	Salmonella	/25g	ISO 6579 (I):2017 (E)	Absent	Absent	Absent	Absent	Absent
	Staphylococcus aureus	/25g	IS 5887 (II) :1976 Reaffirmed 2018	Absent	Absent	Absent	Absent	Absent
	Yeast	cfu/g	IS 5403:1999 Reaffirmed 2018	<10	<10	<10	<10	*Max 10 <sup>3</sup>
	Mold	cfu/g		<10	<10	<10	<10	
CHEMICAL	pH (5% aqueous sol)	-	By FSSAI Manual - Fruits & Vegetable Products (2.3):2016	6.41	6.38	6.35	6.33	Not Specified
	Acidity as citric acid anhydrous	g/100g	By FSSAI Manual - Fruits & Vegetable Products (2.4):2016	1.05	1.10	1.14	1.16	Not Specified
	Moisture	g/100g	By FSSAI Manual - Cereal & Cereal Products (3.0):2021	5.72	5.73	5.80	5.84	Not Specified
ORGANOLEPTIC	Appearance in terms of colour	-	IS 6273 (II): 1971	5	5	5	5	3 to 5
	Odour	-	IS 6273 (II): 1971	5	5	5	5	3 to 5
	Taste	-	IS 6273 (II): 1971	NA	NA	NA	NA	3 to 5
	Texture/ Consistency	-	IS 6273 (II): 1971	5	5	5	5	3 to 5
Result		-	-	Pass	Pass	Pass	Pass	Pass/Fail
Shelf Life Obtained		Months	-	-	4	6	9	-

\*- Internal limits for process hygiene and food safety criteria.  
\*NA-Not Applicable

**Note:** Organoleptic Evaluation  
1-Dislike Very Much; 2 - Dislike Moderately; 3 - Neither Like nor Dislike; 4 - Like Moderately; 5 - Like Very Much

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**Conclusion:**

The product, Palak dal, was received in laminated pouch.

It was stored in room conditions for 0.2 month in client location and then accelerated for 8.8 weeks in conditions equivalent to 8.8 months in room conditions.

It was tested for microbial, chemical and organoleptic parameters.

The results of analysis of the food sample **conform** to the recommended limits for the tested parameters only and **the sample has shelf life of 9 months from the date of manufacture.**

  
Asst. Manager - Microbiology  
(Authorised Signatory)  
Mrs. S. Gunjal

  
Quality Manager  
(Authorised Signatory)  
Mrs. M. Kharade

**Note:**

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