

## SHELF LIFE STUDY REPORT

Reference Number : EQNX:001:LAB:F:24:03:20066

### **PARTICULARS OF SAMPLE ANALYSED**

Client Name:	Muthu Instant Food		
Address:	New No.10, Sarathi Street, 2 A, Aswini Aswathi Apartments, T. Nagar Chennai, Tamil Nadu, India – 600017.		
Contact Person:	Srinivasan Vaidyaraman	Manufacturing Date:	29-Feb-24
Sample Name:	Powder – Pesarattu	Date of Receipt :	06-Mar-24
Batch No :	-	Storage Condition:	Acceleration (38°C & 90% RH)
Packaging Material:	Laminated Pouch	Date of Report:	09-May-24

### **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.

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**Your Testing and Auditing Partner**

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Mfg. Date :29-Feb-24

**RESULTS OF ANALYSIS**

Tests	Date of analysis			6-Mar-24	19-Mar-24	30-Apr-24	Specified Limits
	Phase	Units	Method	A Immediately After Receiving - Zero Time	B After 0.2 month in room conditions and 1.8 week in accelerated conditions	C After 0.2 month in room conditions and 7.8 weeks in accelerated conditions	
MICROBIOLOGICAL	Total viable count	cfu/g	IS 5402 (I) : 2021	6.5 x 10 <sup>2</sup>	7.6 x 10 <sup>2</sup>	8.0 x 10 <sup>2</sup>	Max 10 <sup>6</sup>
	Coliform	cfu/g	IS 5401 (I) :2012 Reaffirmed 2018	<10	5.0 x 10 <sup>1</sup>	8.0 x 10 <sup>1</sup>	Max 10 <sup>2</sup>
	E coli	/g	IS 5887 (I) :1976 Reaffirmed 2018	Absent	Absent	Absent	Absent
	Salmonella	/25g	ISO 6579 (I):2017 (E)	Absent	Absent	Absent	Absent
	Staphylococcus aureus	/25g	IS 5887 (II) :1976 Reaffirmed 2018	Absent	Absent	Absent	Absent
	Yeast	cfu/g	IS 5403:1999 Reaffirmed 2018	<10	<10	<10	Max 10 <sup>4</sup>
	Mold	cfu/g		<10	<10	<10	
CHEMICAL	pH (5% aqueous sol)	-	By FSSAI Manual - Fruits & Vegetable Products (2.3):2016	6.79	6.77	6.74	Not Specified
	Acidity as citric acid anhydrous	g/100g	By FSSAI Manual - Fruits & Vegetable Products (2.4):2016	0.80	0.82	0.84	Not Specified
	Moisture	g/100g	By FSSAI Manual - Cereal & Cereal Products (8.1):2016	9.90	9.91	9.93	Not Specified
ORGANOLEPTIC	Appearance in terms of colour	-	IS 6273 (II): 1971	5	5	5	3 to 5
	Odour	-	IS 6273 (II): 1971	5	5	5	3 to 5
	Taste	-	IS 6273 (II): 1971	NA	NA	NA	3 to 5
	Texture/ Consistency	-	IS 6273 (II): 1971	5	5	5	3 to 5
<b>Result</b>	-	-	Pass	Pass	Pass	Pass/Fail	
<b>Shelf Life Obtained</b>	Months	-	-	2	8	-	

\*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, Powder – Pesarattu, was received in laminated pouch.

It was stored in room conditions for 0.2 month in client location and then accelerated for 7.8 weeks in conditions equivalent to 7.8 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 8 months from date of manufacture.**



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



Quality Manager  
(Authorised Signatory)  
Mrs. M. Kharade

Note:

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