PRODUCT INFORMATION SHEET

Peanut, Almond and Molluscs in Potato powder

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptAL09 (2023) – Allergens IX: Peanut, Almond and Molluscs Barbecue Spice Mixture (with Onion, Garlic and Paprika powder) with "Spiking Level Sample"*
Identifier / LOT	*RM 2023-AL09 SP*
Expiry date	*September 2027*
Matrix	*Potato Powder*
Physical description	*Powder*
Packaging / weight	*Sealed foil pouche / 15 g*
Storage conditions	*2 - 10°C (dry and dark)*
Name and address manufacturer	***DLA - Proficiency Tests GmbH*** *Hauptstr. 80, 23845 Oering, Germany* *Tel. ++49-(0)4532-9183358, Fax. ++49(0)4102-9944976* *eMail. pt@dla-lvu.de, website. www.dla-lvu.de*

Composition of Material

Ingredients	**Amounts**
Potato powder Ingredients: Potatoes, E471, E304, E223, E100	99,9 g/100g
Peanut, roasted milled, mixture (18 products from USA, Asia, Africa, South America) – as peanut* – *thereof 23,2% total protein***	 13,9 mg/kg 3,23 mg/kg
Almond, roasted milled, mixture (23 products from USA, Europe, Australia, Western Asia) – as almond* – *thereof 21,1% total protein***	 25,2 mg/kg 5,32 mg/kg
Molluscs Yesso scallop *(Mizuhopecten yessoensis),* freeze dried – as molluscs* – *thereof 75,7% total protein***	 87,5 mg/kg 66,2 mg/kg
Further Ingredients: *Maltodextrin, sodium sulfate and silicon dioxide*	<0,1 g/100 g

* Allergen contents as "total food" as described in the column ingredients according to the gravimetric mixture
** Protein contents according to laboratory analysis of the raw material (total nitrogen according to Kjeldahl with F=5,18 for almond protein, F=5,46 for peanut protein and F=6,25 for mussel protein)

Minimum Sample Size
A minimum sample size of 5 g is recommended for sample preparation.

The homogeneity tests were performed with sample sizes of 5 g (Microtracer analysis).
The mixture homogeneity before bottling was examined 10-fold by microtracer analysis. Homogeneity was sufficient with a probability of ≥ 25% (excellent mixture) and a HorRat value in the range of acceptance (0,3 to 1,3) (for more details see final report of PT).

Reference Values
All reference values were derived from the related PT round (for more details see final report).

Reference Values quantitative in mg/kg ELISA

Parameter	Molluscs (as Tropomyosin) (for information)
	All methods*
Number of results	6
Number of outliers	-
Assigned Value (Xpt)	***0,0807***
Robust standard deviation	0,0602
Standard uncertainty	0,0307
Target standard deviation σpt	0,0202
Target range	***0,0403 – 0,121***

* Results of diverse ELISA Methods
Note: Due to the heterogeneity of results, the results of all methods were evaluated for information only.

Parameter	Peanut		Almond	
	All methods*	Method RS**	Other methods***	Method RS-F****
Number of results	19	9	11	7
Number of outliers	-	-	-	-
Assigned Value (Xpt)	***31,8***	***34,1***	***18,4***	***26,1***
Robust standard deviation	7,80	8,53	3,03	4,60
Standard uncertainty	2,24	3,55	1,14	2,17
Target standard deviation σpt	7,96	8,53	4,60	6,52
Target range	***15,9 – 47,7***	***17,1 – 51,2***	***9,19 – 27,6***	***13,0 – 39,1***

* Results of diverse ELISA Methods
** ELISA Method: Ridascreen®, R-Biopharm
*** ELISA Method: all except RS-F
****ELISA Method: Ridascreen® Fast, R-Biopharm

Reference Values qualitative ELISA

Parameter	Molluscs *	Peanut *	Almond *
Number positive	7	21	20
Number negative	0	0	0
Percent positive	100	100	100
Percent negative	0	0	0
Consensus value	***positive***	***positive***	***positive***

* Results of diverse ELISA Methods (LODs 0,0017-0,01 mg/kg Tropomyosin, 0,08-1 mg/kg Peanut and 0,1-2,5 mg/kg Almond)

Reference Values qualitative PCR

Parameter	Molluscs *	Peanut *	Almond *
Number positive	7	6	5
Number negative	0	0	0
Percent positive	100	100	100
Percent negative	0	0	0
Consensus value	***positive***	***positive***	***posititve***

* Results of diverse PCR Methods (LODs positive results 0,4-2,5 mg/kg Molluscs, 0,4-10 mg/kg Peanut and 0,4-40 mg/kg Almond)

Intended Use

- for laboratory use only, no food!
- validation of analytical methods
- control sample for quality control charts
- test material for inter-laboratory comparisons
- no medical use

Storage Instructions and Handling Information

The material should be stored as stated on page 1. Before use of the material should be warmed up to room temperature. The content should be mixed thoroughly prior to subsampling (see minimum sample size above). The material should be weighed immediately after opening of the foil pouche/bottle and closed again afterwards in order to avoid uptake of moisture. Frequent freezing and thawing should be avoided as this can lead to changes in the properties of the material. The expiry date of this RM is based on the current knowledge and applies only for proper storage conditions in the originally closed foil pouche/bottle.

Safety Precautions

The usual laboratory safety precautions should be applied when working with the RM considering the type of ingredients, parameters and its concentration.

Data Source

The material was analyzed by 21 laboratories within the related proficiency test (PT). Different analytical methods have been used.

Various

The user must determine the suitability of this RM for its particular purpose. DLA makes no warranty of any kind, expressed or implied, other than its products meet all quality control standards set by DLA. We do not guarantee this product can be used for a special application.

Date: 5 August 2024

Matthias Besler-Scharf, PhD (PT-Coordinator)
- signed U. Vorreiter

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