

PRODUCT INFORMATION SHEET

Celery, Mustard and Sesame in Potato Powder

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	<i>DLA ptAL04 (2023) Allergens IV: Celery, Mustard and Sesame in Boiled Sausage – Spiking Level Sample</i>
Identifier / LOT	<i>RM 2023-AL04 SP</i>
Expiry date	<i>May 2027</i>
Matrix	<i>Potato Powder</i>
Physical description	<i>Powder</i>
Packaging / weight	<i>Sealed foil pouche / 15 g</i>
Storage conditions	<i>room temperature, long term cooled 2 - 10°C (dry and dark)</i>
Name and address manufacturer	DLA - Proficiency Tests GmbH <i>Hauptstr. 80, 23845 Oering, Germany</i> <i>Tel. ++49-(0)4532-9183358, Fax. ++49(0)4102-9944976</i> <i>eMail. pt@dla-lvu.de, website. www.dla-lvu.de</i>

Composition of Material

Ingredients	Amounts
Potato Powder Ingredients: Potatoes, E471, E304, E223, E100	99,9 g/100 g
Celery Seeds, ground, mixture of 8 products (Europe, Asia) – as celery* – thereof 19,4% total protein**	20,4 mg/kg 3,97 mg/kg
Mustard, yellow (<i>Sinapis alba</i>) Seeds, ground, mixture of 9 products (Europe, Asia) – as mustard* – thereof 30,7% total protein**	19,7 mg/kg 6,06 mg/kg
Sesame, white (<i>Sesamum indicum</i>) Seeds, ground, mixture of 10 products (Africa, Asia, South America) – as sesame* – thereof 24,5% total protein**	21,5 mg/kg 5,28 mg/kg
<i>further Ingredients:</i> <i>Maltodextrin and silicon dioxide</i>	<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 with F=6,25 for celery, mustard and sesame 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 8-fold by microtracer analysis. Homogeneity was sufficient with a probability of $\geq 25\%$ (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	Mustard (as total food item)	
	All methods*	Method RS-F**
Number of results	19	14
Number of outliers	1	0
Assigned Value (Xpt)	33,4	30,9
Robust standard deviation	15,3	14,2
Standard uncertainty	4,39	4,75
Target standard deviation σ_{pt}	8,34	7,72
Target range	16,7 – 50,0	15,4 – 46,3

* Results of diverse ELISA Methods / ** ELISA Method: Ridascreen® Fast, R-Biopharm

Parameter	Sesame (as total food item)	
	Method RS-F*	
Number of results	9	
Number of outliers	1	
Assigned Value (Xpt)	50,5	
Robust standard deviation	12,7	
Standard uncertainty	5,29	
Target standard deviation σ_{pt}	12,6	
Target range	25,2 – 75,7	

* ELISA Method: Ridascreen® Fast, R-Biopharm

Reference Values qualitative ELISA

Parameter	Mustard (as total food item)*	Sesame (as total food item)*
Number positive	22	21
Number negative	0	0
Percent positive	100	100
Percent negative	0	0
Consensus value	positive	positive

* Results of diverse ELISA Methods (LODs 0,1-6,5 mg/kg mustard and 0,14-10 mg/kg sesame)

Reference Values quantitative in mg/kg PCR

Parameter	Sesame (as total food item)	
	All methods*	
Number of results	6	
Number of outliers	0	
Assigned Value (Xpt)	23,3	
Robust standard deviation	16,1	
Standard uncertainty	8,20	
Target standard deviation σ_{pt}	5,82	
Target range	11,6 – 34,9	

* Results of diverse PCR Methods

Reference Values qualitative PCR

Parameter	Celery*
Number positive	28
Number negative	0
Percent positive	100
Percent negative	0
Consensus value	positive

* Results of diverse PCR Methods (LODs positive results 0,1-100 mg/kg)

Parameter	Mustard*	Sesame*
Number positive	23	18
Number negative	0	0
Percent positive	100	100
Percent negative	0	0
Consensus value	positive	positive

* Results of diverse PCR Methods (LODs positive results 0,04-5 mg/kg mustard and 0,4-10 mg/kg sesame)

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 39 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.

Datum / Date: 25 July 2024

Dr. Matthias Besler-Scharf (EP-Koordinator / PT-Coordinator)
- gezeichnet / signed M. Besler-Scharf

