

PRODUCT INFORMATION SHEET

**Celery, Mustard and Sesame
in Spiking Level Sample (SP)**

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	DLA ptAL04 (2024) – Allergens IV: Celery, Mustard and Sesame in Instant Soup Powder with "Spiking Level Sample" (3 different Samples) – Sample SP (Spiking Level Sample)
Identifier / LOT	RM 2024-AL04 SP
Expiry date	July 2028
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	Sample A	Sample B	Sample SP present sample
Tomato Cream Soup Powder Ingredients: Tomato powder (37%), starch, sugar, salt, onion powder, rice flour, yeast extract, corn oil, maltodextrin, spices (garlic, pepper), beetroot juice powder, herbs (bay leaves, oregano), flavors and positive sample: allergenic ingredients as below Nutrients per 100 g: Fat < 5,5 g, Carbohydrates 69 g, Protein 5,5 g, Salt 10 g	77,3 g/100 g	77,4 g/100 g	-
Potato Flour Ingredients: Potato flour starch Nutrients per 100 g: Fat 0 g, Carbohydrates 80 g, Protein 0 g	22,6 g/100 g	22,6 g/100 g	-
Potato Powder: 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**	23,9 mg/kg 4,65 mg/kg	-	24,4 mg/kg 4,75 mg/kg
Mustard, yellow (<i>Sinapis alba</i>): Seeds, ground, mixture of 9 products (Europe, Asia) – as mustard* – thereof 30,7% total protein**	17,8 mg/kg 5,48 mg/kg	-	19,2 mg/kg 5,89 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**	17,9 mg/kg 4,40 mg/kg	-	20,8 mg/kg 5,11 mg/kg
further Ingredients: Maltodextrin and silicon dioxide	<0,2 g/100 g	-	<0,2 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=6,25 for celery, mustard and sesame protein)

Note: The metrological traceability of temperature, mass and volume during production of the PT samples is ensured by DAkKS-compliant calibrated reference materials.

Minimum Sample Size / Homogeneity

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 after bottling was examined 10-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).

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	
	All Results*	Method RS-F**
Number of results	17°	8
Number of outliers	2	0
Assigned Value (X_{pt})	29,9	26,4
Robust standard deviation	13,3	12,3
Standard uncertainty	4,04	5,45
Target standard deviation σ_{pt}	7,48	6,61
Target range	15,0 – 44,9	13,2 – 39,7

* ELISA Method: divers Methods

** ELISA Method: RS-F= Ridascreen® Fast, R-Biopharm

° without outliers

Parameter	Sesame		
	All Results (Info)*	Other Methods**	Method RS-F***
Number of results	24°	12°	12
Number of outliers	1	1	0
Assigned Value (X_{pt})	34,4	22,8	44,0
Robust standard deviation	19,7	7,85	19,3
Standard uncertainty	5,02	2,83	6,96
Target standard deviation σ_{pt}	8,59	5,7	11
Target range	17,2 – 51,5	11,4 – 34,2	22,0 – 65,9

* ELISA Method: divers Methods

** ELISA Other Method (all except RS-F) = AgraQuant and AgraQuant Plus, Romer Labs; BioCheck; ELISA-Systems; Gold Standard Diagnostics, Kassel; NutriLinia E; SensiSpec, Gold Standard Diagnostics

*** ELISA Method RS-F= Ridascreen® Fast, R-Biopharm

° without outlier

(Info): for information only

Reference Values qualitative ELISA

Parameter	Mustard*	Sesame*
Number positive	19	25
Number negative	0	0
Percent positive	100	100
Percent negative	0	0
Consensus value	positive	positive

* Results of diverse ELISA Methods (LODs positive results Mustard 0,1-2,0 mg/kg, Sesame 0,2-10 mg/kg)

Reference Values qualitative PCR

Parameter	Celery (as Celery Seeds)*	Mustard*	Sesame*
Number positive	24	22	14
Number negative	0	0	0
Percent positive	100	100	100
Percent negative	0	0	0
Consensus value	positive	positive	positive

* Results of diverse PCR Methods (LODs positive results Celery 0,4-0,8 mg/kg, Mustard 0,4 mg/kg, Sesame 0,4-1,0 mg/kg)

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 poche/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 poche/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 34 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: 3 June 2025

Ulrike Vorreiter
- signed U. Vorreiter