PRODUCT INFORMATION SHEET

Coconut, Egg, Fish and Sesame in Spiking Level Sample (SP)

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptAL01 (2025) – Allergens I:* ***Coconut, Egg, Fish and Sesame in Instant Soup Powder*** *with "Spiking Level Sample" (3 different Samples) –* ***Sample SP*** *(Spiking Level Sample)*
Identifier / LOT	*RM 2025-AL01 SP*
Expiry date	*May 2029*
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**
Broccoli Cream Soup Powder Ingredients: Maltodextrin, palm fat, modified starch, glucose syrup, salt, rice flour, yeast extract, broccoli (2.3%), leeks, onions, stabilizer: diphosphates, spinach, thickener: xanthan gum, garlic, spices, vegetable concentrates (carrot, onion), natural aroma, tomato extract, sunflower oil, lovage and **positive sample:** allergenic ingredients as below Nutrients per 100 g: Fat 19 g, Carbohydrates 59 g, Protein 4,9 g, Salt 9,5 g	99,9 g/100 g	100 g/100 g	-
Potato Powder Ingredients: Potatoes, E471, E304, E223, E100	-	-	99,9 g/100 g
Coconut,* flours** mixture (6 products from Asia and unknown origin) – as coconut* – *thereof 18,8% total protein	 37,3 mg/kg 5,93 mg/kg	-	 38,7 mg/kg 6,15 mg/kg
Whole egg powder*, pasteurized, spray dried**, mixture (6 products from 2 countries, Europe) – as whole egg powder* – thereof 46,9% total protein** – thereof 26,0% egg white protein	 22,9 mg/kg 10,7 mg/kg 5,95 mg/kg	-	 23,5 mg/kg 11,0 mg/kg 6,10 mg/kg
Fish:* Codfish *(Gadus morhua)*, frozen, freeze-dried, milled,** mixture (2 products, Northeast Atlantic) – as fish, dried* – thereof 78,4% total protein** – calculated as fresh fish	 53,0 mg/kg 41,5 mg/kg 265 mg/kg	-	 56,0 mg/kg 43,9 mg/kg 280 mg/kg
Sesame, white (Sesamum indicum):* Seeds, ground, mixture** of 10 products (Africa, Asia, South America) – as sesame* – *thereof 24,5% total protein	 17,9 mg/kg 4,39 mg/kg	-	 17,9 mg/kg 4,39 mg/kg
further Ingredients: Maltodextrin, sodium sulfate and silicon dioxide	<0,1 g/100 g	-	<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=6,25 for coconut protein, whole egg protein and sesame protein, and F=5,60 for fish protein
*** Contents according to literature values: 26,0% egg white protein and fresh codfish with a water content of 80% (Nutrient tables, Souci/Fachmann/Kraut)

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 ≥ 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	**Coconut**	**Whole egg powder**	**Fresh Fish**
	All Results **(Info)***	All Results*	All Results*
Number of results	6°	16°	5°
Number of outliers	2	1	2
Assigned Value (Xpt)	***74,3***	***24,3***	***207***
Robust standard deviation	31,5	6,16	98,2
Standard uncertainty	16,08	1,93	54,9
Target standard deviation σpt	18,6	6,09	51,9
Target range	***37,1 - 111***	***12,2 – 36,5***	***104 - 311***

* ELISA Method: divers Methods
° without outlier / (Info): for information only

Parameter	**Sesame**		
	Methods “Peak 15”*	Methods “Peak 39”**	Method RS-F***
Number of results	6	7°	5
Number of outliers	-	1	-
Assigned Value (Xpt)	***14,5***	***39,0***	***37,0***
Robust standard deviation	7,04	6,85	5,60
Standard uncertainty	3,59	3,23	3,13
Target standard deviation σpt	3,62	9,75	9,24
Target range	***7,24 – 21,7***	***19,5 – 58,5***	***18,5 – 55,5***

* ELISA Methods "Peak 15": AQ = AgraQuant, RomerLabs, BC = BioCheck ELISA and SP = SensiSpec ELISA Kit, Gold Standard Diagnostics
** ELISA Methods "Peak 39": 3M = 3M Protein ELISA Kit, BF = MonoTrace ELISA, BioFront Technologies and RS-F= Ridascreen® Fast, R-Biopharm
*** ELISA Method RS-F= Ridascreen® Fast, R-Biopharm
° without outlier

Reference Values qualitative ELISA

Parameter	Coconut*	Whole egg powder*	Fresh Fish*	Sesame*
Number positive	10	17	7	14
Number negative	0	1	0	1
Percent positive	100	94	100	93
Percent negative	0	6		7
Consensus value	***positive***	***positive***	***positive***	***positive***

* Results of diverse ELISA Methods (LODs positive results Coconut 0,13-2,0 mg/kg, Whole egg powder 0,08-0,5 mg/kg, Fish 0,5-5,0 mg/kg, Sesame 0,2-2,0 mg/kg)

Reference Values qualitative PCR

Parameter	Coconut*	Egg*	Fish, fresh*	Sesame*
Number positive	5	0	7	9
Number negative	0	1	0	0
Percent positive	100	0	100	100
Percent negative	0	100	0	0
Consensus value	***positive***	*none***	***positive***	***positive***

* Results of diverse PCR Methods (LODs positive results Coconut 200-1000 mg/kg, Egg 2 mg/kg, Fish 1,0-1000 mg/kg, Sesame 0,4-1000 mg/kg)
** The result is in qualitative agreement with the spiking of sample A as well as with the ELISA results.

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.

DLA Proficiency Tests

approved (PT-Coordinator)	updated
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12 June 2025	28 May 2026