PRODUCT INFORMATION SHEET

Almond, Coconut and Cashew in Instant Soup Powder (Broccoli Soup)

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptAL08 (2022) Allergens VIII: Almond, Coconut and Cashew in Instant Soup Powder (Broccoli Soup) - Sample A*
Identifier / LOT	*RM 2022-AL08 A*
Expiry date	*April 2027*
Matrix	*Instant Soup Powder*
Physical description	*Powder*
Packaging / weight	*Sealed foil pouche / 25 g*
Storage conditions	*room temperature, long term cooled 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**
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 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
Almond *Almond, roasted, milled mixture (23 products from USA, Europe, Australia, Western Asia)* – as almond* – *thereof 21,1% total protein***	 15,4 mg/kg 3,25 mg/kg
Cashew *Cashew, roasted, milled mixture (9 products from Asia and unknown origin)* – as cashew* – *thereof 18,5% total protein***	 19,2 mg/kg 3,56 mg/kg
Coconut Coconut, flours mixture (6 products from Asia and unknown origin) – as coconut* – *thereof 18,8% total protein***	 33,6 mg/kg 6,32 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=5,30 for cashew protein and F=6,25 for coconut 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) and 1 - 5 g (ELISA methods), respectively.
The mixture homogeneity before bottling was examined 8-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).
The homogeneity tests of the parameters were carried out by ELISA analyzing two subsets from 10 test items (according to ISO 13528:2015 Annex B). Homogeneity was sufficient with a standard deviation between the samples Ss of ≤ 15% („heterogeneity standard deviation“) (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	**Almond (as total food item)**		
	All Methods*	Method RS-F*	Method VT*
Number of results	19	7	5
Number of outliers	0	0	0
Assigned Value (Xpt)	***9,70***	***11,8***	***8,50***
Robust standard deviation	2,64	2,57	0,962
Standard uncertainty	0,756	1,22	0,538
Target standard deviation σpt	2,42	2,95	2,13
Target range	***4,85 – 14,5***	***5,90 – 17,7***	***4,25 – 12,8***

* Results of diverse ELISA Methods, RS-F= Ridascreen® Fast, R-Biopharm, VT = Veratox, Neogen

Parameter	**Cashew (as total food item)**		
	All Methods*	Method BF*	Method RS-F*
Number of results	17	5	5
Number of outliers	0	0	0
Assigned Value (Xpt)°°	***16,7***	***15,6***	***17,8***
Robust standard deviation	3,53	3,19	3,21
Standard uncertainty	1,07	1,78	1,79
Target standard deviation σpt	4,17	3,89	4,46
Target range	***8,33 – 25,0***	***7,78 – 23,3***	***8,92 – 26,8***

* Results of diverse ELISA Methods, BF = MonoTrace ELISA, BioFront Technologies, RS-F= Ridascreen® Fast, R-Biopharm

Reference Values qualitative ELISA

Parameter	**Almond (as total foot item)***	**Cashew (as total food item)***	**Coconut (as total food item)***
Number positive	19	17	6
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 0,1-2,5 mg/kg almond, 0,1-2,5 mg/kg cashew and 0,4-2,5 mg/kg coconut)

Reference Values qualitative PCR

Parameter	Almond*	Cashew*
Number positive	5	6
Number negative	0	0
Percent positive	100	100
Percent negative	0	0
Consensus value	***positive***	***positive***

* Results of diverse PCR Methods (LODs positive results 0,4-2,5 mg/kg almond and 0,4-8 mg/kg cashew)

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 19 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: 27 February 2024

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

DLA Proficiency Tests GmbH
Hauptstr. 80, 23845 Oering, Germany