PRODUCT INFORMATION SHEET

Total Amino Acid Composition in Food (Drink Powder)

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptSU09 (2022) Total Amino Acid Composition in Food (Drink Powder)*
Identifier / LOT	*RM 2022-SU09*
Expiry date	*December 2026*
Matrix	*Drink Powder*
Physical description	*Powder*
Packaging / weight	*Sealed foil pouche / 10 g*
Storage conditions	*room temperature, long term 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
Dietetic Drink Powder, vegan Ingredients: Pea protein isolate (74%), hemp protein powder (7%), rice protein concentrate (7%), cocoa powder, coconut milk powder, flavors, cinnamon, salt Nutrients per 100 g: Fat 4,6 g, carbohydrates 4 g, protein 71 g, salt 0,8 g

Minimum Sample Size

A minimum sample size of 5 g is recommended for sample preparation.
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 calculation of the **repeatability standard deviation S_r of the participants** was also used as an indicator of homogeneity. For all analytes it ranges from 2,10% to 4,06%.

Reference Values

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

Reference Values quantitative in g/100g

Parameter	**L-Alanine**	**L-Arginine**	**L-Aspartic acid**
Number of results	10	10	11
Number of outliers	1	1	-
Assigned Value (Xpt)	***2,89***	***5,75***	***7,53***
Robust standard deviation	0,334	0,427	0,246
Standard uncertainty	0,132	0,169	0,0925
Target standard deviation σ_{pt}	0,0984	0,387	0,552
Target range	***2,50 – 3,27***	***4,98 – 6,52***	***6,43 – 8,64***

Parameter	L-Cystine/L-Cysteine	L-Glutamic acid	Glycine
Number of results	9	11	11
Number of outliers	-	0	0
Assigned Value (Xpt)	***0,733***	***11,5***	***2,68***
Robust standard deviation	0,0935	1,46	0,230
Standard uncertainty	0,0390	0,549	0,0867
Target standard deviation σpt	0,106	0,788	0,178
Target range	***0,521 – 0,945***	***9,96 – 13,1***	***2,33 – 3,04***

Parameter	L-Histidine	L-Isoleucine	L-Leucine
Number of results	11	10	11
Number of outliers	-	1	0
Assigned Value (Xpt)	***1,64***	***3,19***	***5,48***
Robust standard deviation	0,260	0,279	0,434
Standard uncertainty	0,0979	0,110	0,163
Target standard deviation σpt	0,176	0,195	0,295
Target range	***1,29 – 1,99***	***2,80 – 3,58***	***4,89 – 6,06***

Parameter	L-Lysine	L-Methionine	L-Phenylalanine
Number of results	11	9	11
Number of outliers	0	0	0
Assigned Value (Xpt)	***4,50***	***0,817***	***3,62***
Robust standard deviation	0,613	0,167	0,340
Standard uncertainty	0,231	0,0695	0,128
Target standard deviation σpt	0,398	0,0337	0,175
Target range	***3,70 – 5,29***	***0,640 – 0,994***	***3,27 – 3,97***

Parameter	L-Proline	L-Serine	L-Threonine
Number of results	10	11	11
Number of outliers	0	-	-
Assigned Value (Xpt)	***3,02***	***3,54***	***2,42***
Robust standard deviation	0,451	0,376	0,242
Standard uncertainty	0,178	0,142	0,0910
Target standard deviation σpt	0,238	0,212	0,136
Target range	***2,55 – 3,50***	***3,12 – 3,97***	***2,15 – 2,69***

Parameter	L-Tryptophan	L-Tyrosine	L-Valine
Number of results	8	10	9
Number of outliers	1	-	1
Assigned Value (Xpt)	***0,575***	***2,41***	***3,34***
Robust standard deviation	0,103	0,181	0,424
Standard uncertainty	0,0456	0,0714	0,177
Target standard deviation σpt	0,0609	0,160	0,264
Target range	***0,453 – 0,697***	***2,09 – 2,73***	***2,81 – 3,86***

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

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 12 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

Date: 8 January 2026

Ulrike Vorreiter
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