

PRODUCT INFORMATION SHEET

Dietetic Food I: Vitamins A, E, D3, K1, β -Carotene in Drink Powder

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	<i>DLA ptSU07 (2023) Dietetic Food I: Vitamins A, E, D3, K1, β-Carotene in Drink Powder</i>
Identifier / LOT	<i>RM 2023-SU07</i>
Expiry date	<i>January 2027</i>
Matrix	<i>Drink Powder</i>
Physical description	<i>Powder</i>
Packaging / weight	<i>Sealed foil poche / 50 g</i>
Storage conditions	<i>cooled 2 - 10°C (dry and dark)</i>
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
Meal replacement, classic 1 <u>Ingredients:</u> Soy protein isolate, honey, skimmed milk powder, whey protein concentrate, maltodextrin, milk protein concentrate, corn dextrin, potassium phosphate, magnesium hydroxide, anti-caking agent silicon dioxide, vitamin C, Vitamin E, iron phosphate, emulsifier soy lecithin, niacin, zinc oxide, antioxidant alpha-tocopherol, manganese sulfate, calcium D-pantothenate, thiamine (vitamin B1), vitamin B6, vitamin A, copper carbonate, vitamin K, sodium selenite, folic acid, vitamin D3
Meal replacement, classic 2 <u>Ingredients:</u> Pea protein, maltodextrin, carob seed protein, sunflower oil, flavour, potassium phosphate, thickener (sodium carboxymethylcellulose), anti-caking agent (silicon dioxide), tri-calcium phosphate, L-carnitine, sweetener (sodium cyclamate, saccharin), magnesium hydroxide, salt, acidulant (L(+)-tartaric acid), L-ascorbic acid, iron sulfate, zinc oxide, nicotinamide, copper gluconate, calcium D-pantothenate, D-alpha tocopheryl acetate, antioxidant (DL-alpha-tocopherol), pyridoxine hydrochloride, riboflavin, thiamine mononitrate, retinyl acetate, pteroylmonoglutamic acid, potassium iodide, phylloquinone, D-biotin, manganese sulfate, cholecalciferol, cyano-cobalamin
Beta-Carotene Capsules (Dietary Supplement) <u>Ingredients:</u> beta carotene, carrot extract, beetroot extract (added without capsule shells)

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 calculation of the repeatability standard deviation S_r of the participants was also used as an indicator of homogeneity. For all parameters the repeatability standard deviation was $\leq 11,0\%$.

Reference Values

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

Reference Values quantitative

Parameter	Vitamin A (as Retinol) in µg/100g	Vitamin D3 (as Cholecalciferol) in µg/100g
Number of results	7	5
Number of outliers	0	2
Assigned Value (Xpt)	543	3,50
Robust standard deviation	177	1,07
Standard uncertainty	83,5	0,598
Target standard deviation opt	107	0,928
Target range	329 – 758	1,64 – 5,36

Parameter	Vitamin E (as D-α-Tocopherol) in mg/100g	Beta-Carotene in mg/100g
Number of results	6	6
Number of outliers	0	2
Assigned Value (Xpt)	10,1	1,11
Robust standard deviation	2,43	0,236
Standard uncertainty	1,24	0,121
Target standard deviation opt	1,27	0,163
Target range	7,55 – 12,6	0,780 – 1,43

Parameter	Vitamin K (as Phylloquinone) in µg/100g (for information only)
Number of results	3
Number of outliers	0
Assigned Value (Xpt)	48,7
Robust standard deviation	16,3

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 9 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.



approved (PT-Coordinator)	updated
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<i>signed M. Besler-Scharf</i>	<i>signed U. Vorreiter</i>
13 March 2024	5 February 2026