PRODUCT INFORMATION SHEET

Lactose and Fructose in Spiking Level Sample (SP)

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptAI01 (2024): Lactose und Fructose in "lactose-free" Food (Butter Biscuit) with "Spiking Level Sample" (3 different Samples) – **Sample SP** (Spiking Level Sample)*
Identifier / LOT	*RM 2024-AI01 SP*
Expiry date	*September 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**
Vanilla Biscuits, milk- and gluten-free Ingredients: Maize Starch, Raw Sugar, Rice Flour, Palm Vegetable Oil, Rice Bran, Yellow Pea Flour, Brown Rice Syrup, Psyllium Husk, Vegetable Gum (Stabiliser): Guar Gum. Raising Agents: Sodium Bicarbonate, Calcium Carbonate, Salt, emulsifier: Vegetable Derived Monoglyerides. Natural Vanilla Flavour Nutrients per 100 g: Fat 13,6 g, Carbohydrates 66,9 g, Protein 4,2 g	100 g/100 g	99,5 g/100 g	-
Potato Powder Ingredients: Potatoes, E471, E304, E223, E100	-	-	99,5 g/100 g
Lactose*	-	141 mg/100 g	143 mg/100 g
Fructose*	-	352 mg/100 g	353 mg/100 g

* All contents according to gravimetric mixture

***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/100 g

Parameter	Fructose*	Lactose*
Number of results	5°	15°
Number of outliers	1	2
Assigned Value (Xpt)	***464***	***136***
Robust standard deviation	108	12,8
Standard uncertainty	60,2	4,13
Target standard deviation σpt	67,0	7,35
Target range	***330 - 598***	***105 - 167***

* Results of diverse methods
° without outlier

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 18 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: 5 August 2025

Ulrike Vorreiter
- signed U. Vorreiter