PRODUCT INFORMATION SHEET

Lactose
in "lactose-free" (< 100 mg/100g) Cookies for Children

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptAI01 (2026) – Lactose + Fructose in "lactose-free" (< 100 mg/100g) and „lactose-reduced“ (> 100mg/100g and ≤ 1000mg/100g) Cookies for Children [Samples A + B] and "Spiking Level Sample“ [SP] -* ***Sample B***
Identifier / LOT	*RM 2026-AI01 B*
Expiry date	*August 2027*
Matrix	*Cookies*
Physical description	*Powder*
Packaging / weight	*Sealed foil pouche / 25 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 present sample**	Sample SP
Cookies, lactose-free Ingredients: Maize starch, vegetable oils (sunflower, olive), maize flour, brown cane sugar, maltodextrin, gelling agent, dextrin, pea protein, inulin, vegetable fibres, flavouring, lecithin, ammonium hydrogen carbonate, sodium hydrogen carbonate, salt, antioxidant (tocopherol-rich extract) Nutrients per 100 g: Fat 12 g, Carbohydrates 75 g, Protein 5,8 g	99,3 g/100 g	99,9 g/100 g	-
Potato Powder Ingredients: Potatoes, E471, E304, E223, E100	-	-	99,3 g/100 g
Lactose*	300 mg/100 g	30,0 mg/100 g	298 mg/100 g
Fructose*	397 mg/100 g	39,7 mg/100 g	397 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 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/100g

Parameter	Lactose*
Number of results	13°
Number of outliers	1
Assigned Value (Xpt)	***29,4***
Robust standard deviation	5,01
Standard uncertainty	1,74
Target standard deviation σpt	4,60
Target range	***20,2 – 38,6***

* diverse Methods
° without outlier

Reference Values qualitative

Parameter	Lactose*
Number positive	1
Number negative	17
Percent positive	6
Percent negative	94
Consensus value	***negative (< 100 mg/100g)***

* Results of diverse Methods

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, 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 17 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.

created	approved (PT-Coordinator)	updated
Alexandra Scharf, PhD	Alexandra Scharf, PhD	-
signed A. Scharf	*signed A. Scharf*	-
31 August 2026	31 August 2026	-