

PRODUCT INFORMATION SHEET

Lactose and Fructose in “lactose free” Food (Baking Mix for Chocolate Cake)

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	<i>DLA ptAI01 (2023) – Lactose and Fructose in “lactose free” Food – Baking Mix for Chocolate Cake - Sample B</i>
Identifier / LOT	<i>RM 2023-AI01 – B</i>
Expiry date	<i>August 2027</i>
Matrix	<i>Baking Mix for Chocolate Cake</i>
Physical description	<i>Powder</i>
Packaging / weight	<i>Sealed foil pouche / 25 g</i>
Storage conditions	<i>room temperature, long term 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	Amounts
Baking Mix for Chocolate Cake , vegan Ingredients: Wheat flour, raw cane sugar, maize starch, low-fat cocoa 4,5%, baking powder (raising agent: sodium hydrogen carbonate, acidifier: monopotassium tartrate, maize starch), rock salt. Nutrients per 100 g: Fat 3,7 g, Carbohydrates 78 g, Protein 6,1 g	99,6 g/100 g
Lactose*	145 mg/100 g
Fructose*	285 mg/100 g

* All contents according to gravimetric mixture

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 mixture homogeneity before bottling was examined 10-fold by microtracer analysis. Homogeneity was sufficient with a probability of $\geq 25\%$ (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 proficiency test (PT) round (for more details see final report).

Reference Values quantitative in mg/100g

Parameter	Fructose*	Lactose*
Numbers of results	9	15**
Number of outliers	-	3
Assigned Value (X_{pt})	287	137
Robust standard deviation	58,2	14,2
Standard uncertainty	24,3	4,6
Target standard deviation σ_t	41,4	15,8
Target range	204 - 369	106 - 169

* Results of diverse methods

** Without outliers

Results qualitative

Parameter	Lactose*
Number positive	19
Number negative	0
Percent positive	100
Percent negative	0
Consensus value	positive

* 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

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 poche/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 poche/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.

Datum / Date: 19 July 2024

Alexandra Scharf, PhD (EP-Koordinator / PT-Coordinator)
- *gezeichnet / signed A. Scharf*

