PRODUCT INFORMATION SHEET

Iodine and Fluorine in Salt

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	*DLA ptAU03 (2022) Iodine and Fluorine in Salt*
Identifier / LOT	*RM 2022-AU03*
Expiry date	*September 2027*
Matrix	*Salt*
Physical description	*Powder*
Packaging / weight	*Sealed foil pouche / 200 g*
Storage conditions	*room temperature (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	Amounts
Iodine salt with fluoride Ingredients: Boiling salt, potassium fluoride, potassium iodate, separating agent: sodium ferrocyanide	82,1 g/100 g
Rock salt Ingredients: Rock salt, separating agent: magnesium carbonate	17,9 g/100g

Note: *The metrological traceability of temperature, mass and volume during production of the PT samples is ensured by DAkkS calibrated reference materials.*

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 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 deviations S_r of the participants was also used as an indicator of homogeneity. The coefficient of variation (CV_r) for all analytes ranges from 1,29 – 6,38 %. Thus, they were similar to the repeatability standard deviations of the corresponding official methods (e.g. ASU §64 L 00.00-59) (for more details see final report of PT).

Reference Values

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

Reference Values quantitative in mg/kg

Parameter	Iodine	Flourine
Number of results °	7	6
Number of outliers	2	1
Assigned Value (Xpt)	***16,4***	***214***
Robust standard deviation	2,10	12,6
Standard uncertainty	0,993	6,41
Target standard deviation σpt	1,72	15,3
Target range	***13,0 – 19,8***	***183 – 244***

° wthout outliers

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 10 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

approved (PT-Coordinator)	updated
Alexandra Scharf, PhD	Ulrike Vorreiter
signed A. Scharf	*signed U. Vorreiter*
15 July 2024	6 October 2026