MATRIX REFERENCE MATERIAL (RM)
Lead, Cadmium, Arsenic and Mercury

Description of the RM

Name	Contaminated Food: Heavy Metals (Pb, Cd, Hg, As) in Plant Food
LOT	DLA 33/2016
Expiry date	January 2027
Matrix	Plant powder
Physical description	powder
Packaging	Sealed foil pouche
Storage conditions	+ 4°C
Name and address manufacturer	DLA – Proficiency Tests GmbH, Hauptstr. 80, 23845 Oering, Germany

Reference Values in mg/kg

	Lead	Cadmium	Arsenic	Mercury
Numbers of results	8	8	8	9
Number of outliers	1	1	0	0
Mean	1,52	0,505	0,949	0,346
Median	1,44	0,483	0,945	0,365
Robust Mean (X)	1,48	0,483	0,948	0,346
Robust standard deviation	0,152	0,0373	0,0549	0,0843
target range	1,03 – 1,92	0,310 – 0,655	0,642 – 1,25	0,216 – 0,476

Intended use of RM
- for laboratory use only
- validation of analytical methods
- control sample for quality control charts
- test material for inter-laboratory comparisons
- no medical use

Storage instructions
The foil pouche/bottle should be stored at +4°C in a dark place. Before use of the RM the sample should be warmed up to room temperature. The content should be mixed thoroughly prior to subsampling. The material should be weighed immediately after opening of the foil pouche/bottle and closed again afterwards in order to avoid uptake of moisture. 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 normal laboratory safety precautions should be applied when working with the RM considering the contaminants type and concentration.

Data source
The RM was analyzed by 8 laboratories within this proficiency test (PT). Different detection methods have been used in this proficiency test (PT).

Various
The user must determine the suitability of this RM for its particular use. DLA makes no warranty of any kind, expressed or implied, other than its products meet all quality control standards set at DLA. We do not guarantee this product can be used for a special application.

Date:. 17. March 2025