

# DECLARATION OF QUALITY

## METRANAL® 17

### Quality Control Material (QCM)

A set of three natural environmental samples for the determination of traces mercury from solid samples (Recommended especially for Advanced Mercury Analyser AMA-254, Altec Ltd., Czech Republic)

The samples should be used for internal and external quality control purposes (quality control charts, inter-laboratory comparisons, estimation of bias etc.), but not for ensuring traceability of measurements and calibration purposes.

#### *Sample 1*

**Matrix :** Agricultural light sandy soil, grain size < 200 µm

**Property value and its standard uncertainty:**  $0,052 \pm 0,002 \text{ mg Hg (total) / kg (dry weight at } 40 \text{ }^\circ\text{C)}$

#### *Sample 2*

**Matrix :** Fly ash from coal electricity power station, grain size < 200 µm

**Property value and its standard uncertainty:**  $1,32 \pm 0,03 \text{ mg Hg (total) / kg (dry weight at } 40 \text{ }^\circ\text{C)}$

#### *Sample 3*

**Matrix :** Sewage sludge of domestic origin, grain size < 100 µm

**Property value and its standard uncertainty:**  $5,20 \pm 0,40 \text{ mg Hg (total) / kg (dry weight at } 40 \text{ }^\circ\text{C)}$

Minimum recommended sample weight for solid sampling (derived from the homogeneity testing) is 100 mg, 25 mg and 25 mg for the sample 1, 2 and 3, respectively.

The property values were assigned in several laboratories by using validated methods for solid sampling as well as for solution sampling (after total sample decomposition).

CRM's CZ 7004 and LGC 6181 were also applied for the assignment of the property values and for ensuring traceability.

All samples are stabilized by radiation (25 kGy).

Analytika®, spol. s r.o. will monitor this RM over the period of its validity. If substantive changes of reference values occur, Analytika®, spol. s r.o. will notify the purchaser.

**Packing:** 15 g in an amber HDPE bottle (each), bottles packed together in a paper box  
**Batch No.:** 007  
**Declaration issue date:** 28<sup>th</sup> March 2006  
**Date of the last revision:** 19<sup>nd</sup> June 2020  
**Expiration:** 31<sup>th</sup> December 2022  
**Producer:** ANALYTIKA®, spol. s r.o.  
**Production unit Manager:** Mgr. Mirka Petránková  
**Signed:**

*Petránková*

#### Declaration version n. 4

##### Declaration Revision History:

22<sup>nd</sup> June 2020 (minor editorial changes, extension of expiry period)

3<sup>rd</sup> August 2016 (Extension of the period of validity; Editorial changes; Changes in concentration values and related uncertainties)

18<sup>th</sup> March 2016 (editorial changes)