

## Check Sample Test

### Asbestos (quantitative) determined by SEM/EDX

#### 1 PURPOSE OF THE PROFICIENCY TESTING

This Check Sample Test allows laboratories to demonstrate their competence to determine the asbestos present in soils with the SEM/EDX technique.

Microanalitica organizes Proficiency Testing in accordance with the International Standard ISO/IEC 17043.

#### 2 DESCRIPTION OF THE "CHECK SAMPLE TEST"

The samples made available to the participants of the "Check Sample Test" are part of a set of samples that was inserted, after homogeneity test, in an interlaboratory circuit; the samples of the set that have not entered the interlaboratory circuit are used in the Check Sample Test.

The set of test samples consists of soil, which may potentially contain asbestos that has been taken from soil characterized by the presence of natural asbestos; the soil passing through the 2 mm sieve is homogenized and divided into plastic jars.

One jar contains about 30 g of soil.

The laboratory, for the analysis, can use the method normally used in its laboratory with the SEM / EDX technique.

The asbestos result must be expressed in mg/kg.

It is also necessary to indicate, in case of asbestos presence, the type of asbestos found.

#### 3 FINAL REPORT OF CHECK SAMPLE TEST

The data already held by Microanalitica are reprocessed with the result delivered by the laboratory participating in the Check Sample Test, and the asbestos value expressed in mg/kg is assigned to the sample.

Microanalitica Srl follows the instructions contained in paragraph 5.3.1.2 of ISO 13528:2015 which takes into account the results of the participants to calculate the robust average  $x_{pt}$  and the robust standard deviation of the test  $s^*$ .

The performance of the individual laboratories is evaluated with the z-score calculated according to the expression indicated in ISO 13528: 2015 paragraph 9.4.

Interpretation of the z score:

$|z| \leq 2,0$  indicates "satisfactory" performance and does not generate any signal

$2,0 < |z| \leq 3,0$  indicates "questionable" performance (warning sign - W)

$|z| > 3,0$  indicates "unsatisfactory" performance (allarm signal - A)

**Check Sample Test****Asbestos (quantitative) determined by SEM/EDX****4 CONFIDENTIALITY**

In order to ensure the confidentiality of the results, the laboratory that participates in Check Sample Test will be assigned of a number that uniquely identifies it in the Check Sample Test Final Report.

The identification number is communicated to the email address indicated on Check Sample Test application form.

Microanalitica Srl guarantees the confidentiality of all the informations acquired by the participants.