INFORMATION SHEET

MICROANALITICA
PROFICIENCY TESTING 17043

FI 09
Rev. 0
26/05/19

Checked and approved by the Quality Manager /direction: Silvio Tinazzi

Check Sample Test

Filter: airborne asbestos determineted by SEM/EDS

1 PURPOSE OF THE PROFICIENCY TESTING

This Check Sample Test allows laboratories to demonstrate their competence to determine the airborne asbestos 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 homogeneous set of samples that was inserted in an interlaboratory circuit; the samples of the set that have not entered the interlaboratory circuit are used in the Check Sample Test.

The test sample set consists of polycarbonate filters with a diameter of 25 mm with a porosity of 0.8 μm from a simultaneous sampling of air.

The laboratories that participated in the Proficiency Testing applied scanning electron microscopy (SEM / EDX).

The asbestos result must be expressed in asbestos fibers/mm^2.

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

3 FINAL REPORT OF THE PROFICIENCY TESTING EVALUATION

To assign the value of airborne asbestos expressed in asbestos fibers/mm^2, Microanalitica Srl follows the instructions illustrated in point 5.3.1.2 of the ISO 13528: 2015 standard where the robust average value of the results of the x_{pt} participants is taken into account.

In the absence in ISO 13528: 2015 of a performance evaluation method for tests with asymmetrical trend of distribution of values, Microanalitica Srl adopts its own evaluation of the performance of laboratories adapted to the Poisson distribution.

This performance evaluation has been defined with the symbol z_p.

The z_p score number can be both positive and negative, a negative z_p indicates that the participant's result is lower than the assigned value; conversely, a positive z_p indicates that the result is greater than the assigned value.

Interpretation of the z_p score:

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

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

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

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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.