quo data

*QUALITY & STATISTICS!

Certificate

International Proficiency Test GSR2016

organized by QuoData on behalf of ENFSI

Identification of GSR by SEM/EDS

This is to certify that

Microscan Service SA

Labcode: #44

has participated in this proficiency test.

Within the framework of the ENFSI Working Group "Firearms/GSR", the Proficiency Test GSR2016 on the identification and detection of gunshot residue (GSR) particles by means of Scanning Electron Microscopy coupled with Energy Dispersive X-ray Spectroscopy (SEM/EDS) was performed in May/June 2016. In total, 62 laboratories participated in this proficiency test. Each participating laboratory received a specially prepared and identical test sample. The participants were requested to determine the total number of PbSbBa-containing particles on the test sample using their own laboratory-specific methods of automated GSR particle search and detection by SEM/EDS.

The detailed results of the participants are described in the final report dispatched on 16 August 2016.

15 September 2016
Dresden, Germany

Steffen Uhlig, Ph.D.
CEO QuoData GmbH

ENFSI
Expert Working Group
Firearms / GSR

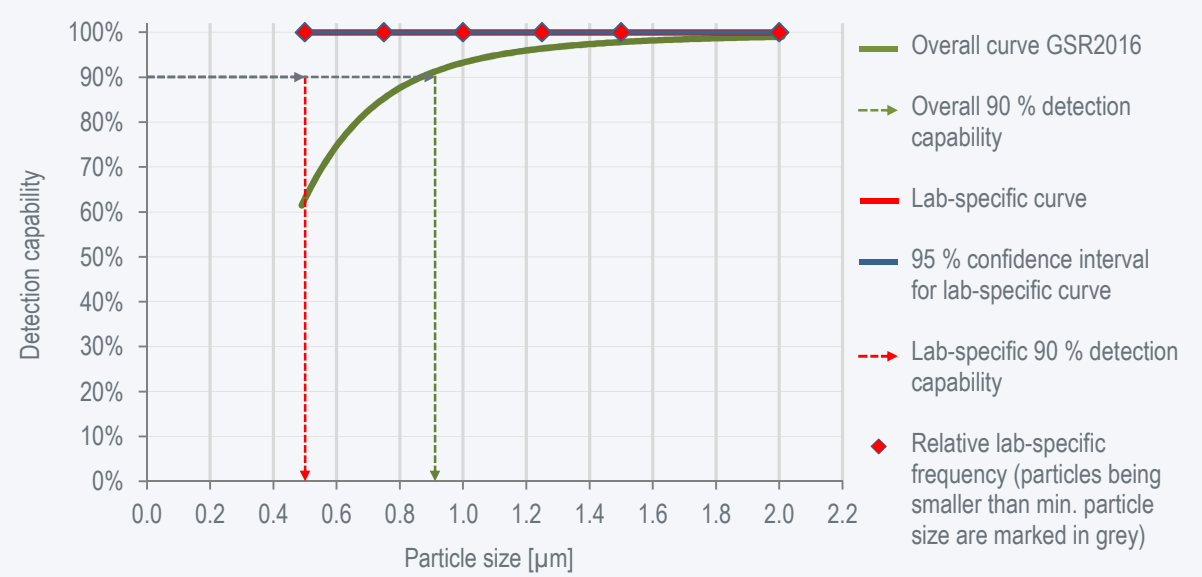
QUO DATA CERTIFIED!

Annex to the certificate of the international Proficiency Test GSR 2016 - Labcode: #44

Detection capability

The laboratory obtained a satisfactory assessment regarding the 90 % detection capability (particle size for which the laboratory reaches a probability of detection of 90 %).

90 % detection capability	Overall mean	Lab result	z score	Assessment
	0.91 µm	≤ 0.50 µm	2.60	satisfactory



z score > -2: satisfactory lab result; -3 ≤ z score ≤ -2: questionable lab result; z score < -3: unsatisfactory lab result

Number of particles correctly detected

The laboratory obtained a satisfactory result for all six particle sizes.

Particle size	True value	Lab result	z score*	Assessment
2.0 µm	25	25	0.00	satisfactory
1.5 µm	26	26	0.00	satisfactory
1.25 µm	23	23	0.00	satisfactory
1.0 µm	27	27	0.00	satisfactory
0.75 µm	24	24	0.00	satisfactory
0.5 µm	25	25	0.00	satisfactory

*) The particles being smaller than the indicated minimum particle size were not assessed.
-2 < z score ≤ 0: satisfactory lab result; -3 ≤ z score ≤ -2: questionable lab result; z score < -3: unsatisfactory lab result