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INFORMATION
for participation in the
Interlaboratory trial for validation of ISO 20596-2

Water quality — Determination of cyclic volatile methylsiloxanes in water –Part 2: Method using liquid–liquid extraction with gas chromatography-mass spectrometry (GC-MS)

Dear colleagues,

Thank you very much for your interest and kind willingness to participate in the interlaboratory trial for the validation that will be organized within the standardization project for establishing ISO 20596-2. Today I would like to give you some further information on the design and the timetable of the trial which will be carried out in **November 2017**.

I would like to clarify that the trial is a **validation exercise** and not a proficiency testing trial. Therefore, **it is crucial that you adhere to the procedure described in ISO/CD 20596-2 revised** that will be made available for each participant.

Please find in the following table some further technical information for your kind attention and consideration when preparing your measurements.

Item	Information
<u>Number of expected participants:</u>	More than 20
<u>Relevant document:</u>	ISO/CD 20596-2 revised
<u>Dispatch of samples:</u>	11th November 2017
<u>Deadline for submission of results:</u>	1st January 2018 (deadline)
<u>Participation fee:</u>	Free of charge
<u>Samples to be analysed (matrices):</u>	Sample 1: Surface water will be taken from an urban area (Lake in Michigan, USA). Sample 2: Municipal waste water will be taken from a plant effluent (Michigan, USA).
<u>Principle:</u>	Analytes to be determined are extracted from the water samples by means of liquid-liquid extraction. After the extraction the substances are separated and detected using GC MS.

Item	Information
<u>Reference substances (stock solutions):</u>	All laboratories will be provided with stock solutions (substances of Table 1 below) and spiking solutions to combine with the corresponding water samples. Each mixture contains known amounts of certified reference substances dissolved in hexane or propanone.
<u>Stabilization / preservation:</u>	Samples will be stabilized with LDPE strips. Any storage of samples should be carried out by refrigeration after arrival.
<u>Reporting of results:</u>	<p>An electronic record sheet (EXCEL file) will be sent out by e-mail to all participants. Data submission will be exclusively done electronically using partly inaccessible EXCEL data reporting spreadsheets enabling subsequent automatic data transfer for computerized evaluation.</p> <p>Finally, participants are requested to give some additional and/or general information about the measurements and procedural details.</p> <p>The file shall be e-mailed to the organizer.</p>
<u>Parameters to be determined:</u>	<p>See attached listing of parameters in Table 1</p> <p>The measurement of all parameters is recommended but not obligatory for participation.</p> <p>Participants are requested to confirm procedural blank concentrations before dispatch of the samples.</p>
<u>Replicates</u>	Three independent replicate analysis from each of the 2 sample types are required.
<u>Concentration range(s):</u>	<p>Spiking concentrations will be in the calibration range as shown in the part 2 of ISO 20596, spike 1 will be added to sample type 1, spike 2 will be added to sample type 2.</p> <p><u>Sample 1 (surface water)</u></p> <p><u>Sample 2 (municipal wastewater)</u></p> <p>All analytes will be present (spiked) in quantifiable concentrations.</p>
<u>Evaluation:</u>	According to ISO 5725-2
<u>Report/certificate:</u>	The results of the trial will be reported in detail to all participants in an anonymous form. The participants included in the evaluation process according ISO 5725-2 can identify their own data via the laboratory code. Detailed tables and graphs will be delivered (e-mail with attached pdf-files).

Table 1 — Cyclic volatile methylsiloxanes to be included in the interlab trial on ISO 20596-2

Compound	Formula	Abbreviation	CAS Registry No.
Octamethylcyclotetrasiloxane	C ₈ H ₂₄ O ₄ Si ₄	D4	556-67-2
Decamethylcyclopentasiloxane	C ₁₀ H ₃₀ O ₅ Si ₅	D5	541-02-6
Dodecamethylcyclohexasiloxane	C ₁₂ H ₃₆ O ₆ Si ₆	D6	540-97-6

Contact details of the interlab organizer:

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Finally, I would like to express my warm thanks in advance for your kind willingness to help us to validate ISO 20596 Part 2.

In case of any questions, please do not hesitate to contact me by e-mail or phone.

Best regards

Jeremy Durham