

# Fact Sheet Proficiency Test

## Gas analysis: Analysis of Siloxanes

### Pilot study for European laboratories

Siloxanes are commonly used in many industrial processes, and therefore trace amounts of siloxane residues are present widely in the environment. Siloxanes present in biogas are key impurities and hazardous for infrastructure and health. Various analytical methods for the determination of the siloxanes content exist. This study is open for all European laboratories that perform these measurements and are interested in the quality of their siloxanes measurements.

#### Contact details:

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#### Siloxanes composition range:

Component	Range (µmol/mol)	Component	Range (µmol/mol)
D3	0.5 – 5 ppm	L2	1 - 5 ppm
D4	0.2 – 2 ppm	L3	1 - 5 ppm
D5	0.1 – 1 ppm	CH <sub>4</sub>	Matrix gas

The pressure in the cylinders will be approximately 5 MPa; cylinders of 5 dm<sup>3</sup> nominal volume will be used.

#### Estimate number of participants:

Maximum number of participants: 10

#### Measurement protocol:

Will be provided by e-mail after shipment of the cylinders, participants has two weeks to perform the analysis.

#### Evaluation:

Evaluation by Z-scores against consensus values. The consensus values will be compared with values derived from preparing the gas mixtures and assessing their homogeneity and stability. All participants will receive a report of the interlaboratory comparison within four weeks after ending the comparison cycle.

#### Accreditation:

The organisation of this Proficiency Test is in accordance with the requirements of ISO/IEC 17043. No accreditation is yet available for this PT.

#### Confidentiality statement:

"VSL keeps all data regarding the performance of individual participants, or groups of participants, strictly confidential. Data is accordingly protected and stored in areas on networks with restricted access. The relationship between results and the laboratories that submitted them will never be disclosed. Only the laboratory is granted access to its performance through the assigned code number."

#### Fee & Schedule:

Contact us for specific schedule and fee details.

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#### Requirement 5.9 ISO/IEC 17025:

*Assuring quality of testing and calibration results:* The laboratory will have quality control procedures for monitoring test validity and calibrations undertaken. This monitoring will be planned and validated and may include the following: *participation in interlaboratory comparisons or proficiency-testing programmes.* #