

Universität Stuttgart

**Institute for Sanitary
Engineering,
Water Quality and Solid Waste
Management**

Universität Stuttgart
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To the attention of
interested water laboratories
in Europe

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Date

Stuttgart, 02nd December 2013

Proficiency test 2/14 TW S3 – Alkylphenols in drinking water –

Dear colleagues,

in February 2014 the execution of the above mentioned proficiency test (PT) round „Alkylphenols in drinking water” is planned.

The PT is carried out under the umbrella of the NORMAN Network of Reference Laboratories for Monitoring of Emerging Environmental Pollutants (<http://www.norman-network.net>) in cooperation with IWW Water Centre.

Details about the PT round are enclosed. Please read them with care.

If you are interested in participation, please complete, sign and return the enclosed application form.

Application deadline: 20th December 2013

You may also register for this PT round online via our website <http://www.aqsbw.de>.

Please consider our general terms and conditions of business for the execution of the PT, which can be downloaded from http://www.aqsbw.de/pdf/agb_en.pdf.

If we receive your application after the deadline we can not guarantee that participation will be possible.

The production of PT samples in this dimension is accompanied with high effort. You support us if you register early.

In cooperation with



For formal reasons we confirm your application by sending a registration confirmation by fax.
If you do not receive this registration confirmation, you are not registered.

If you have any questions, please do not hesitate to contact us:

AQS Baden-Württemberg, Bandtäle 2, 70569 Stuttgart, Germany

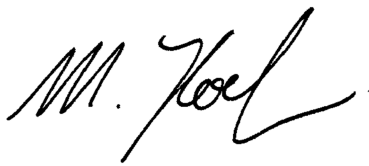
Phone: +49 711 685 65446

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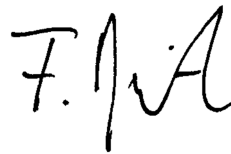
E-Mail: info@aqsbw.de

Contact: Heidi Sanwald, Dr. Frank Baumeister, Dr. Michael Koch

Best regards



Dr.-Ing. Michael Koch
Scientific director AQS



Dr.-Ing. Frank Baumeister
PT manager

Annex:
Details of the proficiency test exercise
Application form

Details of the proficiency test round 2/14
TW S3 – Alkylphenols in drinking water – (December 2013)

Parameters

notation long (notation short)	parameter or parameter group	CAS-number of the parameter or parameter group
Nonylphenol (NP)	4-Nonylphenol (branched) / isomeres mixture	84852-15-3
Octylphenol (OP)	4-(1,1',3,3'-tetramethylbutyl)- phenol	140-66-9
Bisphenol-A (BPA)	Bisphenol-A	80-05-7

Matrix

Drinking water

Dates and deadlines

- Registration deadline: 20th December 2013

Please register for this PT preferably via our website (<http://www.aqsbw.de>) or with the enclosed registration form.

- Dispatch of the samples: 25th February 2014

The sample preparation and dispatch will be organised by IWW

- **Deadline for submission of results: 17th March 2014, 24:00h in written form to the provider. Results submitted after the deadline will not be accepted.**

Sample dispatch

Samples will be sent by courier service.

Sample details

- 3 samples for the determination of Nonylphenol, Octylphenol and Bisphenol A in 2000-ml-ground bottles.

Permitted analytical methods

Participants are free to choose a suitable method.

Limit of quantification

The analytical methods must be able to achieve the following limits of quantification:

parameter	limit of quantification [$\mu\text{g/l}$]
Nonylphenol	0,08
Octylphenol	0,02
Bisphenol A	0,02

Execution of the analysis

The samples must be analysed in the own laboratory with own personnel and own equipment. Subcontracting of the analysis is not allowed.

Evaluation and assessment of the single values

The statistical evaluation will be executed according to DIN 38402 – A45 or ISO/TS 20612 “Interlaboratory comparison for proficiency testing of analytical chemistry laboratories” with the combined estimator Hampel/Q-method, a method of robust statistics. The assigned value x_a , derived from the weighings of the spiked samples and the matrix content^{1,2} will be preferably used for the assessment of the single values. Only if this is not possible, the Hampel estimator as robust mean value of the participants’ data will be used.

If possible, the standard deviation for proficiency assessment $\hat{\sigma}$ will be taken from the variance function for the calculation of the z_U -scores according to DIN 38402 - A45 (chapter 10.4) or ISO/TS 20612 respectively. $\hat{\sigma}$ will be limited for both parameters as follows:

- lower limit: 5 %
- upper limit: 25 %

A z-score is calculated for each measurement result derived from the assigned value x_a and the standard deviation for proficiency assessment:

$$z - score = \frac{result - x_a}{\hat{\sigma}}$$

The z-score will be modified to a z_U -score with a correction factor for proficiency assessment (as described in DIN 38402-A45 and ISO/TS 20612).

The tolerance limit is defined as $|z_U|=2$.

Overall assessment

There is no overall assessment of the proficiency test round, but the single parameters are assessed.

A parameter is assessed as successful, if more than half of the values are correctly determined (2 out of 3 values are within the tolerance limits).

Not successful are:

- 1) Values, which are not determined (if the other samples of this parameters are analysed),
- 2) Values, which are indicated with “lower than limit of quantification”,
- 3) Values, which are subcontracted,
- 4) Values, which are submitted after the deadline of submission of results.

Participation fee

The participation fee will be 500 € plus transport costs.

¹ Rienitz, O., Schiel, D., Güttler, B., Koch, M., Borchers, U.: A convenient and economic approach to achieve SI-traceable reference values to be used in drinking-water interlaboratory comparisons. *Accred Qual Assur* (2007) 12: 615-622.

² Koch, M., Baumeister, F.: Traceable reference values for routine drinking water proficiency testing: first experiences. *Accred Qual Assur* (2008) 13: 77-82.

**Registration for the
proficiency test round 2/14 - TW S3
“Alkylphenols in drinking water”**

Our laboratory will take part in the proficiency test TW S3 – “Alkylphenols in drinking water” – provided by AQS Baden-Württemberg. The participation fee of € 500,- plus transportation costs will be paid after receipt of the invoice. I took note of the terms and conditions under http://www.aqsbw.de/pdf/agb_en.pdf.

For remarks of the organizer

For remarks of the organizer

Obligation

Our laboratory will perform the analyses in our own laboratory, with own personnel and own equipment.

Details of our laboratory:

	Type or print legibly
Name of the laboratory	
Street	
Postal code, City	
Delivery address (if different from the above address)	
Billing address (if different from the above address)	
Country	
Phone / FAX	
E-Mail	
VAT-ID (for participants outside Germany absolutely necessary)	
Contact Person	

date: _____ signature (legally binding): _____

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