

To: Laboratories participating in ProfTest Syke proficiency tests

Proficiency test LT 07/2026 – Leaching behavior test for solid waste material: Two stage batch leaching test

ProfTest Syke will organise a proficiency test (PT) for the laboratories conducting leaching tests for solid waste material in cooperation with KVVY Tutkimus Oy. In this PT the results of the two-stage batch leaching test (EN 12457-3) are compared and evaluated. Following determinations are done from the leaching test eluates: metals (As, Ba, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Sb, Se, V, Zn), Cl⁻, SO₄²⁻, F⁻, DOC, pH, conductivity, and TDS.

The purpose of this proficiency test is to ensure the comparability and accuracy of the results of the participants. About 10 laboratories are expected to participate in this proficiency test. The measurands and samples of this proficiency test are included in the Waste and recycling scheme of the ProfTest Syke accreditation scope (finas.fi/sites/en).

Sample matrix

Fly ash from waste incineration.

Timetable

Registration	24 March – 24 April 2026
Sample dispatch date (national participants)	26 May 2026 (see Chapter 4 <i>Sample delivery</i>)
Leaching test	at the latest by 24 July 2026
Reporting of the results	27 May – 17 August 2026

Participation fee

The participation fee is **750 €** (+ VAT). See detailed information in Chapter 9 *Participation fee*.


Mervi Pajula,
Coordinator


Mirja Leivuori,
Group manager

ProfTest Syke is proficiency testing provider PT01 (SFS-EN ISO/IEC 17043:2023) accredited by FINAS (Finnish Accreditation Service, finas.fi/sites/en).



ProfTest Syke guide for participants is available on ProfTest Syke website (syke.fi/proftest/en).

ProfTestWEB is the electronic client interface for ProfTest Syke proficiency tests wwwp5.ymparisto.fi/Labtest/en. Within the pages, instructions are available on every page. A short *Getting started* manual is available on ProfTestWEB front page.

Organising the proficiency test

1 Organiser

ProfTest Syke, Finnish Environment Institute Syke
Address: Mustialankatu 3, FI-00790 Helsinki, Finland
Email: profTest@syke.fi

Contact

Coordinator: Mervi Pajula, tel. +358 295 252 320
Substitute for coordinator: Riitta Koivikko, tel. +358 295 251 750
Email: firstname.lastname@syke.fi

Cooperation partner and expert laboratory

KVVY Tutkimus Oy (T064, finas.fi/sites/en)

Analytical experts

Two stage batch leaching test Marika Kaasalainen (Finnish Supervisory Agency, LVV)
Email: firstname.lastname@lvv.fi
Anions (IC), DOC, pH, conductivity Virva Kinnunen (KVVY Tutkimus Oy)
Email: firstname.lastname@kvvy.fi
Metals Timo Sara-Aho (Syke)
Email: firstname.lastname@syke.fi

Subcontracting

KVVY Tutkimus Oy: Homogenisation and subsampling of the sample material, pre-testing of samples and determination of homogeneity, as well as the associated chemical and physicochemical analytics and expertise.

LVV: Analytical expertise.

2 Samples and measurands

The method used in this proficiency test is two stage batch leaching test (L/S 2 and L/S 10, EN 12457-3). The sample is fly ash from waste incineration. Particle size is less than 4 mm according to the leaching test standard. One sample will be delivered to the participants (about 200 g per sample). Following determinations are done from the leaching test eluates: metals (As, Ba, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Sb, Se, V, Zn), Cl⁻, F⁻, SO₄²⁻, DOC, pH, conductivity, and TDS.

3 Registration

The registration for this proficiency test is open until **24 April 2026**.

Registration is done via the electronic client interface, ProfTestWEB: wwwp5.ymparisto.fi/Labtest/en. If there are problems when using ProfTestWEB or you need username and password, please contact profctest@syke.fi.

4 Sample delivery

The sample dispatch day for national participants is **26 May 2026**. To ensure timely arrival, the samples are dispatched earlier for participants abroad.

If the sample package does not arrive **at the latest on 29 May 2026**, or there are missing and/or broken sample containers, please contact the provider immediately (profctest@syke.fi). More contact details in Chapter 1 *Organiser*.

5 Sample storage and analysis

The sample should be kept at room temperature in a dry place and protected from light. Sample is analysed within the laboratory where it is delivered to, and analyses are conducted according to the participant's normal procedures.

The two stage batch leaching test should be done at the latest by 24 July 2026. One results per measurand is reported for the evaluation. Replicated analysis should not be done more than according to the method of analysis or the instructions within the sample letter.

6 Reporting the results

The participant results are reported to ProfTest Syke at the latest on **17 August 2026**.

In the waste material used for the PT the concentration of some measurands could be below the limit of reporting. More detailed instructions for the result reporting are given in the cover letter of the samples. An electronic questionnaire (Webropol) of the analytical details according to the guidelines of EN 12457-3 shall be reported to ProfTest Syke together with the results.

ProfTest Syke delivers the preliminary results report to the participants at the latest in the week 35 (24 – 28 August 2026). The final report will be published at the latest in December 2026 and it is then available on ProfTestWEB and on ProfTest Syke website (syke.fi/profctest/en). The availability of the report will be informed to the participants.

7 Assigned values and evaluation of the results

Either the robust mean, the median, or the mean of the results reported by the participants will be used as the assigned value for the measurand. The calculation of the assigned value is based on the results reported according to the given guidelines. Also, the result of the expert laboratory can be used as the assigned value when needed. The evaluation of the results will be based on z scores. The preliminary standard deviation for proficiency assessment will be given in the cover letter of the sample. In special cases also E_n or D% scores can be used for the performance evaluation.

8 Confidentiality

The results of participants are treated anonymously. The participants' results and the preliminary results report of the round are confidential and should not be shared with third parties during the implementation of the round.

9 Participation fee

The participation fee is **750 €** (+ VAT) including all measurements and samples. If the participant orders additional samples, they are charged **200 €** each.

The invoice will be sent after the delivery of the preliminary results report. If the participant orders additional samples, they are charged according to the prices listed above.

Note! In Finland VAT is 25.5 %. Furthermore, if the delivery or invoicing address, or any other additional information needs to be corrected after the first sample delivery or after the invoicing, an extra handling charge will apply. The participant is also responsible for possible custom clearance or customs fee of the samples.