EURL Proficiency Test on the Determination of PFAS in Apple 2026

EURL-PT-PFAS_2602-AP

Announcement

02 March 2026

EURL for halogenated POPs in Feed and Food
c/o State Institute for Chemical and Veterinary Analysis Freiburg
Bissierstraße 5
79114 Freiburg
D-Germany
pt@eurl-pops.eu
+49 761 8855 500
eurl-pops.eu

Summary

Test sample	**FOOD:** Apple [2602-AP]
Analytes of interest **Mandatory** for NRLs: **Optional** for NRLs:	 **PFAS** (PFOS, PFOA, PFNA, PFHxS, Sum of PFOS, PFOA, PFNA, PFHxS) **Other PFAS** (perfluoroalkylcarboxylic acids, perfluoroalkylsulfonic acids, perfluoroalkane sulphonamides)
Participants	NRLs, OFLs, other official laboratories, commercial laboratories performing the analysis of samples taken by food business operators
Statistical evaluation	ISO 13528:2022, IUPAC Protocol
Participation fee	Participation fee for OFLs, other official and commercial laboratories
Registration	Online registration until **25 March 2026**
Shipment of samples	**14 April 2026**
Deadline for reporting of results	**12 June 2026**

1. Introduction

This proficiency test (PT) on the determination of **PFAS** in **Apple** is organized by the EURL for halogenated POPs in Feed and Food to be performed between April and June 2026. The objective is to assess analytical performance of laboratories and inter-laboratory comparability of results from analyses of PFAS in one sample of **Apple.**

National Reference Laboratories (NRLs) for halogenated POPs in Feed and Food from EU member states are requested to participate as part of their work programme for 2026. NRLs are invited to encourage the participation of Official Laboratories (OFLs) from their member states as part of their duties following Article 101 of regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017. Furthermore, participation of OFLs will allow the extension of the data basis for calculation of assigned values and evaluation of results.

Official laboratories and **commercial laboratories** performing the analysis of samples taken by food business operators are invited to participate in this interlaboratory study. First results will be discussed by representatives of European Commission, NRLs and the EURL at the EURL/NRL workshop in November 2026.

Participating laboratories will receive the evaluation of the PT results in preliminary and final reports.

EURL reserves all rights to publish and present the results of the interlaboratory study in scientific journals and/or conferences.

2. Test samples

The test sample is prepared from regular market food and is fortified with analytes of interest using analytical standards or technical mixtures of PFAS.

Each participant will receive about **50 g** of the test sample.

3. Analytes of interest

NRLs for halogenated POPs in feed and food are requested to determine the following parameters:

- **PFAS:**
  - Total perfluorooctane sulfonic acid (total PFOS[1]), perfluorooctanoic acid (PFOA), perfluorononanoic acid (PFNA), perfluorohexane sulfonic acid (PFHxS)
  - Sum of total PFOS[1], PFOA, PFNA, PFHxS

NRLs for halogenated POPs in feed and food are encouraged to determine the following additional parameters for PFAS:

[1] sum of linear and branched stereoisomers, whether they are chromatographically separated or not

- **Optional PFAS**
  - **Perfluoroalkylsulfonic acids (PFSAs):** perfluorobutanesulfonic acid (PFBS), perfluoropentanesulfonic acid (PFPeS), perfluoroheptanesulfonic acid (PFHpS), linear perfluorooctanesulfonic acid (L-PFOS), branched perfluorooctanesulfonic acids (br-PFOS), perfluorononanesulfonic acid (PFNS), perfluorodecanesulfonic acid (PFDS), perfluoroundecane sulfonic acid (PFUnDS), perfluorododecane sulfonic acid (PFDoDS), perfluorotridecane sulfonic acid (PFTrDS)
  - **Perfluoroalkylcarboxylic acids (PFCAs):** perfluorobutanoic acid (PFBA), perfluoropentanoic acid (PFPeA), perfluorohexanoic acid (PFHxA), perfluoroheptanoic acid (PFHpA), perfluorodecanoic acid (PFDA), perfluoroundecanoic acid (PFUnDA), perfluorododecanoic acid (PFDoDA), perfluorotridecanoic acid (PFTrDA), perfluorotetradecanoic acid (PFTeDA)
  - Perfluorooctane sulphonamide **(FOSA)**
  - 2,2,3-Trifluoro-3-[1,1,2,2,3,3-hexafluor-3-(trifluoromethoxy)propoxy]-propionic acid **(DONA)**
  - 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)-propanoic acid **(GenX)**
  - Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonate (major component of **F-53B**)
  - Potassium 11-chloroeicosafluoro-3-oxaundecane-1-sulfonate (minor component of **F-53B**)
  - 1-Propanaminium, N,N-dimethyl-N-oxide-3-[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]amino]-, hydroxide (**Capstone A**)
  - 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]amino]-, hydroxide (**Capstone B**)

4. Methods

Any kind of detection methods can be applied.

All analyses must be performed in the participant's own laboratory with its own personnel and equipment. The test sample shall be analysed in the same manner as routine samples.

5. Participation

NRLs for halogenated POPs in feed and food shall participate in this EURL PT and report the mandatory analytes of interest. From NRLs not participating in this PT or not reporting the mandatory analytes an explanation justifying the non-participation will be requested. In case of lack of collaboration, the suggested “protocol for management of underperformance in comparative testing or lack of collaboration of NRLs” provided by DG SANTE will be followed. A coordination of the participation of OFLs through NRLs is required. The EURL will send the samples only to the NRLs, including the samples for the OFLs in the respective member state, if applicable. For the shipment of the sample by these NRLs to the OFLs a written agreement

between EURL and respective NRLs concerning responsibility for forwarding of samples will be provided.
Complaints regarding the PT organisation, data evaluation and assessment of laboratories performance can be addressed directly to eurl-pops@cvuafr.bwl.de.

6. Statistical evaluation of results

Statistical evaluation of the PT results is performed by the EURL POPs according to:

- ISO 13528:2022, Statistical methods for use in interlaboratory studying by interlaboratory comparisons, International Organization for Standardization
- International Harmonized Protocol for the Interlaboratory studying of Analytical Chemistry Laboratories (IUPAC Technical Report, Pure Appl. Chem., Vol. 78, No. 1, pp-145-196, 2006).

7. Quality control

The Deutsche Akkreditierungsstelle GmbH attests that the provider of proficiency testing Chemisches und Veterinäruntersuchungsamt Freiburg, EU Reference Laboratory (EURL) for halogenated persistent organic pollutants (POPs) in Feed and Food is competent under the terms of DIN EN ISO/IEC 17043:2010 to carry out proficiency testing in the testing field of determination of halogenated persistent organic pollutants (POPs) in food and feed (Accreditation number: D-EP-18625-01-00). All homogeneity and stability testing are performed under accreditation according to DIN EN ISO/IEC 17025:2018.

8. Confidentiality

The identity of participating laboratories will be kept confidential.

For NRLs of EU member states, the suggested “protocol for management of underperformance in comparative testing or lack of collaboration of National Reference Laboratories (NRLs)” will be followed. The confidentiality of NRLs will be kept according to this protocol.

For OFLs of EU member states cooperating with NRL, the respective NRLs will inform the EURL for halogenated POPs about the participating OFLs and will receive the respective laboratory codes, invoices for participation fee and certificates of participation of the OFLs.

9. Participation fee

The participation of **NRLs of EU member states** is free of charge.

For **OFLs of EU member states (in cooperation with NRLs)** the participation fee is **150 €**.

The participation fee for **other official laboratories and commercial laboratories** is **250 €**.

Invoices for participation of **OFLs and other official and commercial laboratories** will be sent before sending of the final report and the certificate of participation. In case of registration for the PT and not reporting of any results a fee of 150 € will be charged.

10. Registration

For registration for this interlaboratory study, participants are asked to firstly register on the EURL PT platform and after that sign up for the current PT study following the link:

https://pt.eurl-pops.eu/

Please register online and sign-up until 25 March 2026.

For further questions, please consult the **Technical Instructions for the PT Platform** or contact eurl-pops@cvuafr.bwl.de in case of technical difficulties.

11. Time schedule

Who	What	When
EURL POPs	Announcement	02 March 2026
Participants	Registration	until 25 March 2026
EURL POPs	Shipment of test samples	14 April 2026
Participants	Confirmation of receipt of test sample	within 7 days
Participants	Reporting of results *There will be no extension of the deadline.*	12 June 2026
EURL POPs	Evaluation and preparation of a preliminary report	July/August 2026
EURL/NRLs	Discussion at COM/EURL/NRL workshop	24/25 November 2026
EURL POPs	Sending of final report to all participants	January 2027

EURL for halogenated POPs in Feed and Food
c/o State Institute for Chemical and Veterinary Analysis of Food Freiburg

Coordinator: Alexander Schächtele
(Head of EURL POPs)
Phone: +49 761 8855 500 E-Mail: eurl-pops@cvuafr.bwl.de