EURL Proficiency Test on the Determination of PCDD/Fs, PCBs, PBDEs, HBCDDs, PCNs and PFAS in Cereal grain meal 2026

EURL-PT-POP_2603-CG

Announcement

01 July 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	**FEED:** Cereal grain meal [2603-CG]
Analytes of interest	
Mandatory for NRLs:	**PCDD/Fs** (17 2,3,7,8-substituted PCDD/Fs) **PCBs** (12 DL-PCBs, 6 NDL-PCBs) **PBDEs** (BDE-28, -47, -49, -99, -100, -153, -154, -183, -209) **HBCDDs** (α-HBCDD, β-HBCDD, γ-HBCDD or total HBCDD)
Optional for NRLs:	**PFAS** (PFOS, PFOA, PFNA, PFHxS, Sum of PFOS, PFOA, PFNA, PFHxS) **Other PFAS** (perfluoroalkylcarboxylic acids, perfluoroalkylsulfonic acids, perfluoroalkane sulphonamides) **PCNs** (20 tetra- to octachlorinated PCN congeners of EURL initial priority list, additional di- to hexachlorinated congeners)
Participants	NRLs, OFLs, other official laboratories, commercial laboratories performing the analysis of samples taken by feed business operators
Statistical evaluation	ISO 13528:2022, IUPAC Protocol
Participation fee	Participation fee for OFLs, other official and commercial laboratories
Registration	Online registration until **22 July 2026**
Shipment of samples	**04 August 2026**
Deadline for reporting of results	**23 October 2026**

1. Introduction

This proficiency test (PT) on the determination of **PCDD/Fs, PCBs, PBDEs**, **HBCDDs, PCNs** and **PFAS in Cereal grain meal** is organized by the EURL for halogenated POPs in Feed and Food to be performed between August and October 2026. The objective is to assess analytical performance of laboratories and inter-laboratory comparability of results from analyses of PCDD/Fs, PCBs, PBDEs, HBCDDs, PCNs and PFAS in one sample of **Cereal grain meal.**

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 feed 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 commercially available feed and fortified with analytes of interest using analytical standards or technical mixtures of PCDD/Fs, PCBs, PBDEs, HBCDDs, PCNs and PFAS.

Each participant will receive about **80 g** of the test sample.

3. Analytes of interest

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

- **PCDD/Fs and PCBs:**
  - 17 2,3,7,8-substituted PCDD/Fs
  - WHO-PCDD/F-TEQ (using WHO2005-TEF)
  - 12 dioxin-like PCBs
  - WHO-PCB-TEQ (using WHO2005-TEF)
  - WHO-PCDD/F-PCB-TEQ (using WHO2005-TEF)
  - Six non-dioxin-like PCBs (indicator PCBs): PCB 28, 52, 101, 138, 153, 180
  - Sum of six non-dioxin-like PCBs (indicator PCBs): Sum of PCB 28, 52, 101, 138, 153, 180
  - PCDD/F-PCB-BEQ, PCDD/F-BEQ and/or PCB-BEQ, if applicable (using bioanalytical screening methods)

- **PBDEs and HBCDDs:**
  - PBDEs: BDE-28, BDE-47, BDE-49, BDE-99, BDE-100, BDE-153, BDE-154, BDE-183, BDE-209
  - Sum of 8 PBDEs (without BDE-209), sum of 9 PBDEs (with BDE-209)
  - HBCDDs: α-HBCDD, β-HBCDD, γ-HBCDD
  - Sum of α-, β-, γ-HBCDD (using HPLC methods) or total HBCDD (using GC methods)

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

- **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
  - **Perfluoroalkylsulfonic acids (PFSAs):** perfluorobutanesulfonic acid (PFBS), perfluoropentanesulfonic acid (PFPeS), perfluoroheptanesulfonic acid (PFHpS), linear perfluoroctanesulfonic acid (L-PFOS), branched perfluoroctanesulfonic acids (br-PFOS), perfluorononanesulfonic acid (PFNS), perfluorodecanesulfonic acid (PFDS), perfluoroundecane sulfonic acid (PFUnDS), perfluorododecane sulfonic acid (PFDoDS), perfluorotridecane sulfonic acid (PFTrDS)

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

- **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**)

- **PCNs:**
  - Priority List: Individual PCNs 42, 48, 53, 59, 63, 69, 70, 73, 74, 75
  - Priority List: Pairs of PCNs 28/36, 52/60, 66/67, 64/68, 71/72 (difficult to separate chromatographically)
  - Additional di- to hexachlorinated congeners or sum parameters

4. Methods

One or more of the following **detection methods** can be applied:

- GC-HRMS-, GC-MS/MS-methods or other alternative methods for PCDD/Fs and dioxin-like PCBs
- Bioanalytical screening methods for PCDD/Fs and dioxin-like PCBs
- Any kind of method for indicator PCBs, PBDEs, HBCDDs, PFAS and PCNs

All analyses must be performed in the participant's own laboratory with its own personnel and equipment.

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. Shipment and storage of the sample

The test sample will be shipped on **04 August 2026** by a carrier uncooled in HDPE bottles. NRLs will receive the samples for OFLs in their EU Member States. NRLs are asked to distribute the samples to the participating OFLs in their member state. The samples can be stored at ambient temperature after receipt. Due to the possible instability of brominated contaminants, it is recommended to protect the opened sample from UV light.

7. 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).

8. 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 17043:2023 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). Homogeneity and stability testing is performed under accreditation according to DIN EN ISO/IEC 17025:2018.

9. 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.

10. 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 following participation fees have to be paid:

- 250 € for determination of PCDD/Fs and/or DL-PCBs, NDL-PCBs
- 150 € for determination of PCDD/Fs, DL-PCBs using bioanalytical screening methods only
- 150 € for determination of NDL-PCBs only
- 150 € for determination of PBDEs, HBCDDs only
- 150 € for determination of PFAS only
- 150 € for determination of PCNs only

In case of analysis of different groups of analytes (PBDEs, HBCDDs, PCNs, PFAS) in the same sample the additional costs per group are 50 € (e.g. for additional analysis of PBDEs and/or HBCDDs and/or PCNs and/or PFAS in addition to PCDD/Fs or PCBs).

The participation fees for **other official laboratories and commercial laboratories** are:

- 350 € for determination of PCDD/Fs and/or DL-PCBs, NDL-PCBs
- 250 € for determination of PCDD/Fs, DL-PCBs using bioanalytical screening methods only
- 250 € for determination of NDL-PCBs only
- 250 € for determination of PBDEs, HBCDDs only
- 250 € for determination of PFAS only
- 250 € for determination of PCNs only

In case of analysis of different groups of analytes (PBDEs, HBCDDs, PCNs, PFAS) in the same sample the additional costs per group are 75 €.

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.

11. 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:

EURL PT Platform:

(**direct link: https://pt.eurl-pops.eu/**)

Please register and sign-up until 22 July 2026.

Please consult the ***Technical Instructions for the PT Platform*** (on https://eurl-pops.eu/ website) or contact eurl-pops@cvuafr.bwl.de in case of technical difficulties.

12. Time schedule

Who	What	When
EURL POPs	Announcement	01 July 2026
Participants	Registration, lab codes, instructions	until 22 July 2026
EURL POPs	Shipment of test samples	04 August 2026
Participants	Reporting of results *There will be no extension of the deadline.*	23 October 2026
EURL POPs	Evaluation and preparation of a preliminary report	November 2026
EURL/NRLs	Discussion at COM/EURL/NRL workshop	24/25 November 2026
EURL POPs	Sending of final report to all participants	June 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