SPECIFIC PROTOCOL

3th Interlaboratory Study on the Determination of alpha-Cypermethrin in Animal Fat and Liquid Cream

„alpha-cypermethrin (ILS aC-03)“

(09.04.2025)

Version 1.1: Registration link has been changed (11.04.2025)

➢ Introduction

This protocol is complementary to the valid version of the General Protocol for EU Proficiency Tests for Pesticide Residues in Food and Feed, Ed. 12[1]. The current interlaboratory study covers only alpha-cypermethrin in two different matrices. This interlaboratory study (ILS) is voluntary for all laboratories participating in this year's EUPT AO 20. This means that there are no additional costs for the participants due to the joint shipping of the PT items. The commodity chosen to prepare the test material is animal fat (porcine) and liquid cream. They are considered as a representative commodity for “milk and milk products, Group 8” and “fat from food of animal origin, Group 10” (see Annex A of document SANTE 11312/2021v2)[2].

➢ PT item (test material)

This interlaboratory study concerns the analysis of alpha-cypermethrin in liquid cream and animal fat. The matrices contains only spiked alpha-cypermethrin (CAS-Number 67375-30-8).

Since 2020, the EURLs for pesticide residues do not provide blank PT items. Each laboratory is asked to use “pesticide free” representative animal fat and milk (product) for recovery experiments as well as for the preparation of matrix-matched or procedural calibration standards.

The organisers will check the PT items for sufficient homogeneity and for stability using conditions that reproduce sample shipment and storage for the duration of the proficiency test.

All these tests will be conducted by the EURL-AO which is accredited according to ISO 17043 for organising proficiency tests.

[1] https://www.eurl-pesticides.eu/userfiles/file/EurlALL/General_Protocol_V12_2025.pdf

[2] https://food.ec.europa.eu/system/files/2023-11/pesticides_mrl_guidelines_wrkdoc_2021-11312.pdf

The participants will receive ~ 50 g of animal fat PT item (one bottle) and ~ 80 g of liquid cream PT item (one bottle) containing spiked alpha-cypermethrin.

- **Analytical parameters**

The PT items contain alpha-cypermethrin. Laboratories should adjust the concentration to their own calibration levels.

Please, report important observations during analysis in the EU Survey in the special field for comments.

- **Shipment of PT item**

Dispatch of the PT item was on 07 April 2025 together with the EUPT AO 20 PT items.

PT items will be shipped in bottles in a thermal isolated box with cooling. The organisers will aim to ensure that all participating laboratories will receive their PT items as soon as possible. PT items will be shipped with TNT/FedEx and DHL. Prior to shipment an e-mail will be sent to the participating laboratories from the shipper.
Laboratories must make their own arrangements for the receipt of the package. They should inform the organiser of any public holidays in their country/city during the week of the shipment, and must make all necessary arrangements to receive the shipment, even if the laboratory is closed.

- **Instructions on PT item handling**

Once received, the PT item shall be stored frozen (-18°C) to avoid any deterioration/spoilage and to minimise possible pesticide losses.

Bring the content of the PT item slowly to room temperature without applying heat and homogenise (without shaking vigorously) the whole sample thoroughly before analysis, including any liquid that may be present due to the technical processing. Otherwise phase separation could occur for the liquid cream PT item!

It is recommended to divide the whole sample amount into analytical test portions and weigh them into the tubes used for extraction. All analytical test portions not used for analysis should be stored chilled. This procedure helps to avoid possible losses caused by several thawing steps of the test material.

All participants should use their own routine standard operating procedures for extraction, clean-up and analytical measurement and their own reference standards for identification and quantification purposes. Considering the available amount of PT item, laboratories employing methods requiring large analytical portions are advised to scale them down.

The general safety requirements and operating instructions for handling hazardous substances and their disposal must be observed.

The homogeneity tests were conducted using 10 g of the liquid cream PT item and 0.5 g of the porcine fat PT item using EN1528 method.

As sub-sampling variability increases with decreasing analytical portion size, sufficient homogeneity can only be guaranteed where participants employ analytical portions that are equal or larger than those stipulated in the previous sentence.

- **EU Survey and Deadlines**

Each participating laboratory is assigned its own lab code. This code is important for reporting. Analytical results and other information (e.g. name of the manufacturer of the own standards used, the batch number, internal standard etc.) are to be submitted via the EU Survey (open in incognito or private window). The laboratory name provided by the participants will not be changed and will be stated on the certificate.

1. **PT item receipt and acceptance**

Receipt of the sample does not need to be confirmed by the laboratory. However, if participants have not received the PT items or there are any discrepancies, they must inform the organiser immediately by e-mail (eurl-pesticides@cvuafr.bwl.de) by the **14 April 2025 at noon**. Otherwise the EURL AO will assume that the laboratory has received the material in perfect condition.

2. **Results and method submission**

After shipment of the samples, from **14 April 2025** onwards, it is possible to submit the results by logging into the EU Survey. **The deadline for result submission is 30 May 2025 at 23:00 CEST.**

The results report is provided via the following survey:

https://ec.europa.eu/eusurvey/runner/ILS_aC_03_Results

You will receive the password in advance together with your personal lab code for this study (not the EUPT AO20 lab code!)

Important: After the final submission it will NOT be possible to edit the results. The website will not be accessible after this date and any results reported after the deadline will not be included in the statistical treatment, or in the final report.

3. **Reporting of quantitative results**

Significant figures:

Residue levels shall be expressed to three significant figures, e.g. 0.0581, 0.251 or 1.35 mg/kg.

The expanded measurement uncertainty is queried purely on a voluntary basis for information purposes during result submission. The expanded measurement uncertainty is not intended to be published in reports, but is only used for internal plausibility checks.

4. Reporting information on analytical methodology

All laboratories are requested to provide information on the analytical method(s) they have used via EU Survey. It is mandatory to state the requested information. The laboratories are requested to fill-in this information in order to minimise the administrative burden of collecting this information at a later date.

- **Follow-up actions**

By sending the preliminary report to the participants, all participants are requested for a proof reading of the preliminary report. In particular the **NRLs and OFLs** with an individual **z-score ≥ 3.0** are requested to **give feedback to EURL-AO** on any actions undertaken to find out the reasons for poor performance.

- **Documents**

In the EURL-document repository (CIRCA BC) all documents relating to ILS aC-03 can be found. Links to most of the documents are also available on the ILS aC-03 website.

- **External supplier**

No task was conducted by the assistance of external suppliers.

➢ **Time schedule**

Actor	Activity	Date
EURL	Announcement and first information for PT participants via e-mail	24 February 2025
Participant	**Registration** via EU survey	24 February – 21 March 2025
Participant	Proof of shipment address in EURL-Datapool	Ending 24 March 2025
EURL	**Dispatch of test material**	**07 April 2025**
Participant	Information of EURL AO, if no sample was received	08 - 14 April 2025
Participant	Reporting of results and method information	14 April – 21-May 2025
Participant	**Deadline for reporting of test results**	**30 May 2025**
EURL	Preliminary report	16 July 2025
Participant	Proof Reading of preliminary report	5 October 2025
EURL	Dispatch of the final report as pdf-file	Approx. end of 2025

*) Please make sure to report your results on time as there will be no extension of the deadline.

➢ **Participation fee**

There will be no additional fee for participating in this study.

Only the fee for the EUPT AO 20 applies:

There is a fee of EUR 200.00 for shipping and handling to participants within the European Union and EFTA countries (including NRLs). Fees for participants from other countries are EUR 400.00. An invoice will be sent as pdf-file via e-mail.

EUPT-Coordinator:

Björn Hardebusch

Head of EURL-AO (Food of Animal Origin and Commodities with High Fat Content)
CVUA Freiburg
Department of Residues and Contaminants
Bissierstrasse 5
D-79114 Freiburg

Phone: +49-761-8855-137
E-Mail: Bjoern.Hardebusch@cvuafr.bwl.de
eurl-pesticides@cvuafr.bwl.de

Organisation Team at the EURL AO Freiburg:

Björn Hardebusch	Head of EURL AO	CVUA Freiburg
Sarah Obermeier	Food Chemist	CVUA Freiburg

Quality Control Group:

Antonio Valverde	University of Almería, Almería, Spain
Paula Medina Pastor	EFSA, European Food Safety Authority, Parma, Italy

Advisory Group:

Amadeo R. Fernández-Alba	Head of EURL-FV, University of Almería, Spain
André de Kok	Wageningen Food Safety Research, Wageningen, The Netherlands
Carmen Ferrer Amate	EURL-FV, University of Almería, Spain
Finbarr O´Regan	Pesticide Control Laboratory, Department of Agriculture, Fisheries and Food, Kildare, Ireland
Hans Mol	Wageningen Food Safety Research, Wageningen, The Netherlands
Hermann Unterluggauer	Austrian Agency for Health and Food Safety (AGES), Innsbruck, Austria
Magnus Jezussek	Bavarian Health and Food Safety Authority, Erlangen, Germany
Marine Lambert	ANSES, Agence nationale de sécurité sanitaire de l'alimentation, de l'environement et du travail, Maisons-Alfort Cedex, France
Mette Erecius Poulsen	Head of EURL CF, DTU National Food Institute, Lyngby, Denmark
Michelangelo Anastassiades	Head of EURL SRM, CVUA Stuttgart, Fellbach, Germany
Patrizia Pelosi	Istituto Superiore di Sanità, Rome, Italy
Ralf Lippold	CVUA Freiburg, Freiburg, Germany
Stephan Radim	Czech Agriculture and Food Inspection Authority, Prague, Czech Republic
Tuija Pihlström	National Food Agency, Uppsala, Sweden