Director
Metrology service Ltd.


Bozhko Nataliia
December 10th 2018

# PROFICIENCY TESTING PT.UA.3.2.2017

# VEGETABLE OIL (SAFETY)

# PROFICIENCY TESTING PROGRAMME – ROUND 2 (ENG)

Kyiv-2018

# 1. INTRODUCTION

Given the key role of reliable test results that are needed during world vegetable oil trade and agriculture in general, requirements for the competence of laboratories that perform such tests should be confirmed.

The purpose of proficiency testing in vegetable oil testing is to determine the characteristics of the operation (as described in ISO/IEC 17043 [1]) and improve the reliability of test results.

This proficiency testing involves the use of inter-laboratory comparisons to confirm the performance of individual laboratories' abilities and/or identify areas of improvement.

# 2. DESCRIPTION

## 2.1. PARTICIPATION

2.1.1. Minimum methods for participation. Any organization, providing testing by at least one of methods in clause 2.2 may participate in this voluntary Program.

2.1.2. Participant may provide results for all the methods according to clause 2.2.

2.1.3. Metrology service Ltd. assigns a unique identification number to each participant that is confidential and reported only to this participant.

2.1.4. Participation fee for participants from Ukraine is 8 000.00 UAH without paying VAT. Participation fee for participants from outside of Ukraine is 350.00 USD.

## 2.2. METHODS

Participants can provide test results for the following methods:

| | Parameter | Method | Note |
|---|---|---|---|
| 1. | Benzo(a)pyrene, μg/kg | ISO 15302:2007 | |
| 2. | Benzo(a)pyrene, μg/kg | AOCS Official Method Cd 21-91:2017 | |
| 3. | Residual technical hexane content, mg/kg | ISO 9832:2002/ДСТУ ISO 9832:2004 | |
| 4. | Residual solvent content, mg/kg | AOCS Official Method Ca 3b-87:2017 | |
| 5. | Total sterols content, mg/kg | ISO 12228-1:2014 | |
| 6. | Cholesterol content, % | ISO 12228-1:2014 | |
| 7. | Total sterols content, mg/kg | AOCS Official Method Ch 6-91:2017 | |
| 8. | Cholesterol content, % | AOCS Official Method Ch 6-91:2017 | |
| | Gas chromatography of fatty acid methyl esters | | |
| 9. | Palmitic acid C16:0, % | ISO 12966-4:2015 | |
| 10. | Stearic acid C18:0, % | ISO 12966-4:2015 | |
| 11. | Total C18:1 (Sum of isomers), % | ISO 12966-4:2015 | |
| 12. | Total C18:2 (Sum of isomers) | ISO 12966-4:2015 | |
| 13. | Palmitic acid C16:0, % | AOCS Official Method Ce 1a-13:2017 | |
| 14. | Stearic acid C18:0, % | AOCS Official Method Ce 1a-13:2017 | |
| 15. | Total C18:1 (Sum of isomers), % | AOCS Official Method Ce 1a-13:2017 | |
| 16. | Total C18:2 (Sum of isomers) | AOCS Official Method Ce 1a-13:2017 | |

## 2.3. SAMPLES

Metrology service Ltd. is using a validated procedure and appropriate technical experts and contractors for the selection, production, homogenization and division designs that is satisfactory for the purposes of this program. Tests that are required to prove homogeneity and stability of samples are performed by competent contractors according to [3-7].

Metrology service Ltd. will send appropriately identified and packaged sample together with task sheet form for testing and reporting results via courier delivery service of Nova Poshta LLC or other delivery service chosen by participant.

**Sunflower oil is used as a sample in round 2 in an amount of approximately 100 ml for each participant.**

## 2.4. SCHEME AND SCHEDULE

2.4.1. This proficiency testing program is a simultaneous participation schemes according to A.3 of appendix A ISO\IEC 17043[1]. Selected samples, prepared according to clause 2.3, from a source of material being distributed simultaneously to participants for concurrent testing. After completion of the testing, the results are returned to Metrology Service Ltd. Task sheet form for testing and reporting results is distributed with the sample according to clause 2.3. Metrology use statistical methods to analyse results and provide report according to clause.2.5.

2.4.2. Round 2 schedule.

| | |
|---|---|
| Participants registration | **till 13-00 EET 12.07.2019** |
| Sample shipment | **15.07.2019** |
| Reporting results for participants | **till 13-00 EET 01.08.2019** |
| Report publication | **till 12.08.2019** |

## 2.5. REPORT AND PROCESSING RESULTS

2.5.1. Metrology service Ltd. processes and analyses results according to [1-7].

2.5.2. Metrology service Ltd. publishes the Proficiency testing report according to [1,2].

2.5.3. Proficiency testing report will be published in two languages – English and Ukrainian. Basic (reference) language is English.

## 3. PARTICIPANT INFORMATION

Participants must provide the following information by **e-mail in form Addition 1.**

## 4. PROVIDER CONTACTS AND PROGRAM MANAGER

Metrology Service Ltd., Ukraine, 03022, Kyiv, 18 Lomonosova str., office 704.
Nataliia Bozhko
e-mail: pt.smetrology@gmail.com
tel.: +38(099)305-79-78

## 5. NORMATIVE REFERENCE

1. ISO/IEC 17043:2010 Conformity assessment -- General requirements for proficiency testing
2. ISO 13528:2015 Statistical methods for use in proficiency testing by interlaboratory comparisons
3. FOOD ANALYSIS PERFORMANCE ASSESSMENT SCHEME (FAPAS). Protocol for the organization and analysis of data, sixth edition, 2002
4. Fearn, T. and Thompson, M, A new test for 'sufficient homogeneity', Analyst, 2001, 126, 1414-1417
5. ISO Guide 35:2017 Reference materials -- Guidance for characterization and assessment of homogeneity and stability
6. ILAC Discussion Paper on Homogeneity and Stability Testing, April 2008.
7. ISO 17034:2016 General requirements for the competence of reference material producers.

**Addition 1.**

| | |
|---|---|
| **PT Program Name:** | |
| **The full name of the laboratory** | |
| | |
| **Full legal entity name:** | |
| **Address:** | |
| | |
| **Bank details:** | |
| | |
| | |
| **Name of the person signing the Contract and on the basis of which:** | |
| **Delivery address of the sample** | |
| **Name of the responsible person from the Participant:** | |
| **Contact telephone number (if possible, mobile) and email address of the responsible person from the Participant:** | |
| | |
| | |
| **Certificate delivery address** | |
| **Date of application:** | |

* All fields are required.