# **PROFICIENCY TESTING**

# - General information -

ACTALIA Cecalait is accredited by COFRAC, for many years, for its activity of organiser of proficiency testings (according to the ISO 17043 standard\*) and on tests (according to ISO 17025 standard\*\*), which demontrates our expérience, our qualification and our skill.

The proficiency testings and criteria marked with an \* are covered by the « accréditation n° 1-2473, comparaisons interlaboratoires, portée disponible sur <a href="www.cofrac.fr">www.cofrac.fr</a> »/« n° 1-2473 accreditation, interlaboratory comparisons, scope available on <a href="www.cofrac.fr">www.cofrac.fr</a> »\* and by the « accréditation n° 1-5577, essais, portée disponible sur <a href="www.cofrac.fr">www.cofrac.fr</a> »/« n° 1-5577 accreditation, tests, scope available on <a href="www.cofrac.fr">www.cofrac.fr</a> »\*\*, and detailed scope available on <a href="www.cofrac.fr">www.cofrac.fr</a>.

Our highly qualified team of engineers, chemists and bacteriologists specialising in milk and dairy products analysis puts their technical skills at your disposal to answer all your questions and provide you with support regarding the results obtained on the proposed proficiency testings. You will find all the contact details of the experts in the « contacts » page at the beginning of this catalog.

#### 1) The samples

#### a. Nature

Our proficiency tests have been created to ensure the **transferability of the performances observed in the proficiency testings to samples routinely analysed** in participating laboratories. As a result, the proposed proficiency testings samples are "true" dairy matrices and are, in addition, as close as possible in terms of composition (chemical, bacterial flora, etc.) as the samples routinely analysed.

#### b. Number

Our proficiency testings are composed of **5 to 13 samples**. this number was defined, by matrix/criterion, to ensure the relevance and the completeness of the performance evaluation carried out.

Indeed, this approach firstly allows an evaluation on the measurement range defined by the method(s). It also ensures the relevance of the final performance criteria which are the mean of the deviations (d) and the standard deviation of the deviations (Sd) from the values assigned for the quantitative aptitude testings and the frequency of true responses % for qualitative proficiency testings.

Using these calculated indicators, it is thus possible to distinguish a systematic error on the measurement range or a specific error on a sample, a level effect of the measured analyte, etc., thus allowing a **true diagnosis** of the considered method. Proficiency testings with a smaller number of samples could not provide as complete information on laboratory performance.

Note: In the case of a proficiency testing (or only a criterion) with less than 7 participants, ACTALIA Cecalait will study the possibility (when possible) of providing participating laboratories with an additional sample or a sample directly included in the range, corresponding to a reference material (SRM matrix or pure solutions) whose results will be used to select the laboratories as part of the definition of the assigned value.

## c. Quality control

In order to guarantee the quality of the performance evaluation on the basis of the analytical results obtained on the samples sent, the sets of samples produced are subject to homogeneity and stability control:

- The control of homogeneity of the produced batch is **systematically** carried out (on accredited proficiency testings) by analysis in duplicate of a representative sample of the batch (all levels are checked).
- The stability control of the samples is **systematically** carried out (on accredited proficiency tests) over the validity period of the samples.

# 2) Reception, storage and analysis of the samples

#### a. Sending of the samples

The samples, an accompanying letter and a delivery note are sent by express carrier according to the terms described for each proficiency testing in the catalogue.

#### b. Reception and storage

If you receive a broken, damaged and/or repackaged parcel, please contact us immediately to inform you the procedure to follow according to the problem.

The conditions by sample type are as follows:

#### PHYSICO-CHEMISTRY:

- 1 Most samples for physico-chemical analyses contain a preservative. Nevertheless, samples must be stored at positive cold at 4 (± 2) °C (except for dried products: at room temperature)
- 2 The samples must not be frozen.

#### MICROBIOLOGY:

- 1 Upon receipt of the package, the temperature measured in the attached water vial must not exceed 15°C.
- 2 Most samples for microbiological analyses contain a bacteriostatic preservative. Nevertheless, samples **must be** stored at positive cold. We recommend storing them at 3 ( $\pm$  2) °C. However, you can store them at 5 ( $\pm$  3) °C according to ISO 7218 recommendations if the storage is planned just before analysis.
- 3 The samples must not be frozen.
- 4 After analysis, the samples must be destroyed applying the procedures described in ISO 7218 standard or according to the current legislation.

#### **ANTIBIOTICS:**

- 1 Freeze-drying stabilises the samples, nevertheless they must be stored at positive cold. We recommend storing them at 3 ( $\pm$  2) °C. However, you can store them at 5 ( $\pm$  3) °C according to ISO 7218 recommendations if the storage is planned just before analysis.
- 2 The analyses must be carried out at the latest within 4 hours after reconstitution with positive cold storage at 3 (± 2) °C
- 3 Once reconstituted, the samples can be frozen.

#### 3) Analysis of samples by the laboratories

- The proficiency testing samples must be treated in the same way as the majority of samples usually tested.
- The samples must be analysed within the time limit specified in the accompanying letter provided with the samples.

#### 4) Communication with the participating laboratories

Communication with participants is done through the member area of the website <a href="www.cecalait.fr">www.cecalait.fr</a>, accessible using a username and password previously transmitted. The email addresses used for this communication are those registered in the "My contacts" section of the member area of the site.

### a. Sending of the samples

Information regarding the sending of samples is given in the email sending the blank results return files.

#### b. Sending of the technical information

Blank proficiency test results return files are available on the day the samples are sent. Participants are informed of their availability by e-mail to the address declared to ACTALIA Cecalait for this use.

#### c. Sending of the results by the participants

The results of the proficiency testings must be transmitted on the results return files (made available on the day the samples are sent, see b.), respecting:

- The expected deadline for returning results
- The completeness of the information requested on the form (units, method used and other mandatory fields) Uncertainties associated with participants' proficiency testing results are not required, therefore they are not used to evaluate participant performance.

## d. Sending of the results and pre-results

The reports, in the form of an anonymous PDF version file, and the pre-results (provided as part of the qualitative microbiology proficiency testings) are put on the member area of our website. Participants are informed of their availability by e-mail to the address declared to ACTALIA Cecalait for this use.