



# 2025 CATALOGUE

ACTALIA cecalait offers a wide range of services to laboratories which analyse milk and dairy products to make all their analysis results more reliable:

- Interlaboratory proficiency testings
- Standard reference materials

**Nearly 900 laboratories in the world trust ACTALIA Cecalait to monitor their analytical performances**



Accréditations,  
n° 1-2473, Comparaisons inter-laboratoires,  
n° 1-5577, Essais  
Portée disponible sur [www.cofrac.fr](http://www.cofrac.fr)

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# CECALAIT SERVICES

1 - Herewith you will find the descriptions of the proficiency testing and secondary reference materials proposed in 2025.

You will also find this catalog in printable version (pdf) on our website [www.cecalait.fr](http://www.cecalait.fr).

Please keep this document, or if you do not use it, pass it on to your laboratory or your quality assurance and control department.

2 - Registrations for proficiency testing and secondary reference materials must be renewed each year. It is not done automatically, you have to reproduce them via your account client on our [www.cecalait.fr](http://www.cecalait.fr) website

To obtain a client account, please complete and validate the form available in the “Customer area”, “New customer” part. Upon receipt of your request, we will send you an username and the procedures for obtaining a password and using our website.

3 - To receive January secondary reference materials dispatches in time, please fill in your registration forms before:

**December 6<sup>th</sup> 2024**

# REGULATION

a) **Order, which is done online from our website [www.cecalait.fr](http://www.cecalait.fr), binds both ACTALIA Cecalait and the subscribing laboratory.** This means that the latter undertakes to respect the following clauses and the general terms and conditions of sale. When the order is received, within the authorised registration deadline, the laboratory is registered and consequently will be consignee of the samples ordered.

ACTALIA Cecalait proposes an annual individual membership that allows you to benefit from preferential rates for proficiency testings and the supplying of bibliographical information, as well as free information through a quarterly newsletter. So, if you want to be member, please fill in and validate the form available in the customer area of your account of our website, under "My information", "Membership" part.

b) **Participation criteria:** ACTALIA Cecalait reserves the right to refuse the registration of a laboratory in case there would be problems of customs with the country, internal laws preventing the parcel from arriving in the expected deadlines. Also, a customer who would not honor his invoices to ACTALIA Cecalait would see refusing its subscription. For the orders without annual subscription, they must be validated before 3 p.m. (valid from Monday to Wednesday) (except for countries outside EU, for which time before dispatch may take up to 7 days, the time necessary to obtain customs documents). Each order on request will be subject to validity of the samples and availability.

c) ACTALIA Cecalait cannot be held responsible:

- for any problems linked to inappropriate handling or use.
- for any delay caused by customs of the consignee's country, in so far as ACTALIA Cecalait produced the documents required by customs. In accordance with this point, for customers outside the European Union, the customer agrees to contact his local transport agency in order to facilitate / optimize the delivery of his package.
- for outside deadline reception of parcels and reported analyses due to a bank holiday in the destination country.
- for late delivery times if the customer has using a transport provider other than that contractually linked to ACTALIA Cecalait.

Payment will nevertheless be due.

d) **Each subscription will be invoiced**, according to the tariffs in force fixed by ACTALIA Cecalait, when the statistical treatments are returned to the laboratories concerning the proficiency testings, and in the course of the year for the standard reference materials.

Transport fees and the costs of customs documents, if applicable, are invoiced in addition on the invoice of each proficiency testing and for the standard reference materials, on the annual invoice (from about January to April) and on one or two additional invoices in August and December. If the carrier is chosen by the customer, the costs of transport, the costs of customs documents and packages tracking are in charge of the client.

The amount indicated corresponds to the net total to be paid by bank transfer to ACTALIA Cecalait. All local taxes, bank charges, withheld or other tax provisions specific to the country will be borne **exclusively** by the subscriber. All charges recorded on your payments will systematically be re-invoiced.

e) Cancellation of a registration will be considered **only if ACTALIA Cecalait is notified prior to the date of dispatch of the samples**. If the order is validated on your member area, the cancellation request must be sent by email to [cecalait@actalia.eu](mailto:cecalait@actalia.eu), otherwise it can be deleted directly on the website. Cancellation by telephone must be confirmed by email or fax.

f) **We use the communication with the user laboratories thanks the member area of our website** (downloading of the blank results files, statistical data treatment, reference values...). For this communication, we use the e-mail addresses registered in the "My contacts" part in the member area of the website. These addresses can be modified, deleted or added during the course of the year, thanks to the form available in this part.

g) The customer is responsible to immediately store the package upon receipt at the appropriate temperature (freezer, room temperature, refrigerator) depending on the nature of the samples. ACTALIA Cecalait therefore disclaims any liability relating to the temperature of the package after delivery. In case of refusal to accept the package (received in time), the return costs are at the customers expense.

h) To reduce the transport fees for the client, the sending of samples may be delayed to the following day for proficiency testings and to the following week for standard reference materials, in order to couple with other samples.

i) **Claim/recourse/appeal process:** Claims have to be sent using your member area of our [www.cecalait.fr](http://www.cecalait.fr) website. They are centralized by Ms. Nadine TROSSAT (telephone +33.3.84.73.63.12 - email: [n.trossat@actalia.eu](mailto:n.trossat@actalia.eu)). Claims specific to transport are directed to Ms. Camille BARDET (telephone +33.3.84.73.63.20 - email: [c.bardet@actalia.eu](mailto:c.bardet@actalia.eu)). They will be responsible for recording your claim, monitoring its processing with the relevant departments and providing a response in return. The claims/appeals processing process is available upon request.

j) **For proficiency tests specifically:**

- Some proficiency tests proposed by ACTALIA Cecalait are covered by the scope of accreditation♦.

♦ « *accréditation n°1-2473, comparaisons interlaboratoires, portée disponible sur [www.cofrac.fr](http://www.cofrac.fr) »/« n° 1-2473 accreditation, interlaboratory comparisons, scope available on [www.cofrac.fr](http://www.cofrac.fr) » according to NF EN ISO/CEI 17043 standard.*

ACTALIA Cecalait is accredited for **flexible scope**.

With this flexible scope, ACTALIA Cecalait is considered competent to modify, develop and implement interlaboratory comparisons within the competence area covered by the general scope and according to the requirements defined in the LAB CIL REF 08 Cofrac document (available in [www.cofrac.fr](http://www.cofrac.fr)).

The general scope defines the general application scope of the ACTALIA Cecalait's accreditation. The exhaustive list of the accredited interlaboratory comparisons♦ proposed is detailed only in the flexible scope. This list is available on request from ACTALIA Cecalait or via the [www.cecalait.fr](http://www.cecalait.fr) website.

- **Eligibility criterion:** all the laboratories, accredited or not, may participate in Cecalait's proficiency testings

- **ACTALIA Cecalait reserves the right to cancel a criterion in the event of less than 10 laboratories participating (in order to guarantee the validity of the statistical treatment).**

- **Subcontracting / External service:**

♦ In general, ACTALIA Cecalait does not use subcontractors or external service providers to carry out a proficiency test. However, various aspects of the proficiency test program may occasionally be subcontracted/carried out by an external service provider.

In this case, the participant/client is obviously notified and the service is entrusted to a competent subcontractor/service provider for whom ACTALIA Cecalait is responsible.

However, certain activities will never be subcontracted/outsourced:

- Design and planning of proficiency test programs
- Performance evaluation
- Authorization of reports

- **Collusion / Falsification:**

♦ Purpose of a proficiency test:

We remind you that **the purpose** of a proficiency test is to **evaluate the performance of the participating laboratory**. We therefore draw the participant's attention to the fact that it is in their interest and must report results obtained with integrity.

♦ Laboratory commitment:

The participating laboratory **undertakes not to carry out collusion** with other participants and **undertakes not to falsify its results**.

♦ Arrangements are made and **precautions put in place** to prevent collusion between participants or falsification of results.

♦ Sanction

However, despite these precautions, if ACTALIA Cecalait becomes aware of possible collusion/falsification, the laboratory will be sanctioned: its results in the proficiency test will not be taken into account and the laboratory will not receive the proficiency test report in which it participated. Invoicing will nevertheless be due.

- **In their own interests, participating laboratories are requested to send their results back within the deadline indicated on the results sheet. If not, ACTALIA Cecalait will begin the statistical analysis and the results of latecomers will not be taken into account. In this case, the proficiency test will be invoiced in full.**

- The results of the anonymous statistical data treatment and the identification number are available on the member area of each client on the website.

- **The statistical data treatments following sample dispatch (as long as the dates for return of results are respected by the participants) will be returned within at most the first work day after:**

- **25<sup>th</sup> day for proficiency tests on phosphatase activity, acidity, lipolysis, cream, whey, concentrated whey, dried whey, pathogenic flora in cheese (3 criteria "Listeria"),**
- **30<sup>th</sup> day for proficiency tests on homogenised milk, fromage frais, butter, acetone-BHB, PAG, pathogenic flora in raw milk (4 criteria), pathogenic flora in cheese (5 criteria), antibiotics and butyric spores,**
- **35<sup>th</sup> day for the other proficiency tests.**

- **Confidentiality:**

♦ Participation in ACTALIA Cecalait's proficiency testings contractually implies (validation of the purchase order) the participant's acceptance of the anonymous use of their results for purposes of general interest (determination of the assigned values, study of the improvement of methods, performance, etc.).

♦ The identity of the participant/customer as well as all documents and information that they have provided are treated as confidential, unless they lift confidentiality or this is agreed in advance contractually between the participant/customer and ACTALIA Cecalait.

♦ However, ACTALIA Cecalait may be required to disseminate this information, to disclose confidential information (in particular the results of a aptitude test):

- by contractual commitments, in particular in the case of internal or external audits.
- in exceptional circumstances, such as by law, a regulatory authority or authorized by contractual provisions.

The concerned client will then be notified in writing of this action within one week unless prohibited by law.

♦ Information about the participant or client obtained from a source other than the participant or client (e.g. complainant or regulatory authority) is also kept confidential. The identity of the source is kept confidential and will not be disclosed to the participant or client unless the source agrees.

- **Permission to refer to the accreditation:** In accordance with the rules established in the Cofrac GEN REF 11 document: "Règles générales pour la référence à l'accréditation et aux accords de reconnaissance internationaux / General rules for the reference to accreditation and international recognition agreements", clients are not authorized to use the ACTALIA Cecalait accreditation mark. ie the Cofrac / Essais and Cofrac / Comparaisons interlaboratoires logos of ACTALIA Cecalait (apart from the complete reproduction of the documents that ACTALIA Cecalait issued to him, in particular the reports).

This document is available on the Cofrac website: [www.cofrac.fr](http://www.cofrac.fr).

ACTALIA Cecalait nevertheless ensures that its clients comply with the rules established in the Cofrac GEN REF 11 document.

If ACTALIA Cecalait is aware of an incorrect use of its accreditation by one of its clients, ACTALIA Cecalait will contact this client:

- to ask him to immediately stop / modify this non-compliant use
- to inform anyone who has read it.

Also and in accordance with the GEN REF 11 document, if ACTALIA Cecalait notices an improper or abusive use of the accreditation mark, or of the Cofrac logo, it will refer to Cofrac.

- The proficiency tests will be invoiced as follow:

- ♦ a fixed part, registration fees, which covers the costs of organisation, registration, management of the participants and packaging of the samples.
- ♦ a variable part, participation fees, which is proportional to the number of analytes or methods that the participating laboratory has subscribed for, and the number of additional results returned. It covers the costs of treatment for a single data set, management of the participants and reporting of the results by ACTALIA Cecalait. Any result returned to ACTALIA Cecalait is invoiced.
- ♦ any criteria can present a supplementary cost which corresponds to the supply of specific samples.
- ♦ transport fees and costs of customs documents, if applicable.

- ACTALIA Cecalait cannot be held responsible for any problem related to the proficiency testing results of a laboratory.

- Concerning recourse / appeal, if you have a claim regarding the evaluation of your performance, please inform us (by post or by email) within 2 weeks after receiving the report of proficiency testing. In this case, we will contact you for the processing of your claim.

#### k) **For standard reference materials specifically:**

- An annual subscription corresponds to an order of a same criteria, of a same SRM, for at least 6 consecutive months. The cost is in this case proportional to the number of samples still to be sent. The transport fees are invoiced

## ----- SPECIAL CONDITIONS

### International delivery by international carrier

- ♦ In Europe: the delivery time is generally 1 to 3 days depending on the country and the city
- ♦ Intercontinental: the delivery time is generally 1 to 4 days depending on the country and the city.

Please inquire in advance about customs deadlines and regulations specific to your country (administrative import formalities which are your responsibility and which have an impact on deadlines).

Please note that it may take up to 7 days before shipping to obtain customs documents for export.

**On condition for the dispatch to certain destinations, please contact us concerning this point**



# 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 demonstrates 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 [www.cofrac.fr](http://www.cofrac.fr)** »/« **n° 1-2473 accreditation, interlaboratory comparisons, scope available on [www.cofrac.fr](http://www.cofrac.fr)** »\* and by the « **accréditation n° 1-5577, essais, portée disponible sur [www.cofrac.fr](http://www.cofrac.fr)** »/« **n° 1-5577 accreditation, tests, scope available on [www.cofrac.fr](http://www.cofrac.fr)** »\*\*, and detailed scope available on [www.cecalait.fr](http://www.cecalait.fr).

Our highly qualified team of engineers, chemists and bacteriologists specialising in dairy 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, 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 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 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 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 at 3 (± 2) °C until 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 at 3 (± 2) °C.**

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 [www.cecalait.fr](http://www.cecalait.fr), 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)

**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.

## - Statistical data treatment and emission of individual reports -

A statistical treatment of the results is realised for each parameter in accordance with our general provisions (DGTEAQT for quantitative proficiency testings and DGTEAQL for qualitative proficiency testings):

- **Quantitative analysis method**

- Determination of the assigned values per samples after selection of the laboratories on:
  - the analysis of the samples in the required delay
  - the selection on the applied method and, where applicable, the recovery on pure solutions or on control samples
- For each sample, calculation of the mean of the laboratory's results (or taking into account of the unique value if no analyses in duplicate) after transformation or not (Log for the microbiological quantitative PT) and of the deviation between the mean calculated by the laboratory and the assigned value.
- For each laboratory and for all the samples:
  - calculation of the mean deviation  $d$  (assigned value - result of the laboratory), and calculation of the standard deviation of deviation of the assigned value  $S_d$ .
  - Representation of the laboratory performances positioning on a conformity target
- Evaluation of the laboratory's performance by comparing its  $d$  and  $S_d$  values in relation to the limits and the positioning on a conformity target.

At the end of the statistical treatment, an individual report is emitted containing the evaluation of the laboratory's performance ( $d$ ,  $S_d$  and conformity target) with an emoticon 😊 ☹️

Various elements are also included in the individual report **for information only**:

- An evaluation of the laboratory's repeatability.
- An evaluation of the laboratory's accuracy sample per sample, as a Z score form (except for infrared proficiency testing).
- An evaluation of the calibration for the methods requiring calibration (milk lipolysis, raw milk amido black, infrared method, somatic cells and urea only)
- An evaluation of the linearity (raw milk amido black and infrared method only).
- An evaluation of the intercorrections among channels (infrared method only).

An instruction to understand the proficiency testing report and the exploitation of the results is available via a web link (instruction for the physico-chemistry or quantitative microbiology proficiency testing report) on the report or on the website [www.cecalait.fr](http://www.cecalait.fr).

- **Qualitative analysis method**

- For each sample, the laboratory's result is compared to the reference value
- For each laboratory, calculation of the accuracy answers frequency for all of the samples.

At the end of the statistical treatment, an individual report is emitted containing the evaluation of the laboratory's performance ( $d$ ,  $S_d$  and conformity target) with an emoticon 😊 ☹️

Various elements are also included in the individual report **for information only**:

- Information concerning the methods used by all the participating laboratories
- Table of samples characteristics
- Results of all the participating laboratories (table of laboratories results (positive/negative))
- Histogram representing the correct answers frequency.

An instruction to understand the proficiency testing report and the exploitation of the results is available via a web link (instruction for the physico-chemistry or quantitative microbiology proficiency testing report) on the report or on the website [www.cecalait.fr](http://www.cecalait.fr).

- **Particular case for the phosphatase activity proficiency testing**

The individual report sent to the participating laboratories contains a qualitative part and a quantitative part.

- For laboratories having transmitted only quantitative results, qualitative results will be generated on the basis of standardised tolerances (separate for milk and cheese)
- For laboratories having transmitted only qualitative results, the "quantitative" part will remain blank.

- **Particular case for the antibiotics proficiency testing**

For these proficiency testings, the laboratory's performance is not formally evaluated in the individual report sent. Indeed, the laboratory's performance is linked to the detection limits of the method used in this test, it will therefore be up to the laboratory to evaluate its performance with regard to its results and the performance of its method.

CALENDAR OF PROFICIENCY TESTINGS - 2025

JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
W 1	W 1	S 1		S 1		T 1		T 1		S 1		T 1	GOAT TOTAL FLORA	F 1		M 1	RAW MILK ACETONE-BHB	W 1	W 40	S 1		M 1	RAW MILK
T 2		S 2		S 2		W 2	W 14	F 2				W 2	W 27	S 2		T 2	TOTAL FLORA	T 2		S 2		T 2	TOTAL FLORA
F 3						T 3		S 3		M 2	RAW MILK	T 3		S 3		W 3	W 36	F 3				W 3	W 49
S 4		M 3	MIR MEDIAN	M 3	RAW MILK ACETONE-BHB	F 4		S 4		T 3	TOTAL FLORA	F 4				T 4		S 4				M 3	BUTTER / DRIED WHEY BUTYRIC
S 5		T 4	PL5	T 4	TOTAL FLORA	S 5				W 4	W 23	S 5		M 4		F 5		S 5				T 4	
M 6	BUTYRIC	W 5	W 6	W 5	W 10	S 6		M 5	MIR MEDIAN	T 5		S 6		T 5		S 6						W 5	W 45
T 7		T 6		T 6				T 6		F 6				W 6	W 32	S 7		M 6	YOGURT PHOSPH. MILK	T 6		T 6	
W 8	W 2	F 7		F 7		M 7	PHOSPH. CHEESE	W 7	W 19	S 7		M 7		T 7				T 7	PL5	F 7		F 7	
T 9		S 8		S 8		T 8	PF3 LISTERIA	T 8		S 8		T 8		F 8		M 8	MIR MEDIAN FROMAGE FRAIS	W 8	W 41	S 8		S 8	
F 10		S 9		S 9		W 9	W 15	W 9				W 9	W 28	S 9		T 9		T 9		S 9		S 9	
S 11						T 10		S 10		M 9		T 10	HOMO MILK	S 10		W 10	W 37	F 10				W 10	W 50
S 12		M 10	HOMO MILK RETENTATE	M 10	ACIDITY PHOSPH. MILK	F 11		S 11		T 10	HOMO MILK	F 11				T 11		S 11				L 10	
		W 12	W 7	W 12	W 11	S 12				T 12	W 24	S 12		M 11		F 12		S 12		M 11		M 11	
M 13		T 13		T 13		S 13		M 12	INFANT FORMULA POWDER	T 12		S 13		T 12		S 13				M 12	W 46	M 12	W 46
T 14	PF5	F 14		F 14				T 13	CREAM / GOAT TOTAL FLORA	F 13				W 13	W 33	S 14		M 13	PROC. CHEESE/ RETENT / MIR HIGH	J 13		J 13	
W 15	W 3	S 15		S 15		M 14	MIR HIGH	W 14	W 20	S 14		M 14		T 14				T 14		V 14		V 14	
T 16		S 16		S 16		T 15	SOFT CHEESE TOTAL FLORA	T 15				T 15		F 15		M 15	HOMO MILK	W 15	W 42	S 15		S 15	
F 17						W 16	W 16	F 16		M 16		W 16	W 29	S 16		T 16	LIPOLYSIS PFMC	T 16		D 16		D 16	
S 18		M 17	DRIED WHEY ANTIBIO	M 17	PROC. CHEESE YEASTS-MOULDS	T 17		S 17		T 17	LIPOLYSIS	F 18		S 17		W 17	W 38	F 17				S 17	
S 19		T 18	CREAM	T 18	LIPOLYSIS	S 19				W 18	W 25	T 19				T 18		S 18		M 17	CONC. WHEY ANTIBIO	T 18	CREAM PF4
		W 19	W 8	W 19	W 12	S 20		M 19	HARD CHEESE ANTIBIO	T 19		S 20		T 19		S 20				W 19	W 47	W 19	W 47
M 20		T 20		T 20				T 20	PLMC	F 20				T 20		W 20	W 34	S 21		M 20	WHEY DRIED MILK	T 20	
T 21	TOTAL FLORA	F 21		F 21		M 21		W 21	W 21	S 21		M 21		T 21				S 21		T 21	PF3	F 21	
W 22	W 4	S 22		S 22		W 22	W 17	T 22				W 22	W 30	F 22		M 22	YEASTS-MOULDS ANTIBIO	W 22	W 43	S 22		S 22	
T 23		S 23		S 23		T 24		F 23		M 23		W 23	W 30	S 23		T 23	CREAM	T 23		S 23		T 23	
F 24						T 24		S 24		T 24	PF4	F 25				W 24	W 39	F 24				W 24	W 52
S 25		M 24	PF4 / PAG / BUTTER	M 24	WHEY EWE RAW MILK	F 25		S 25		W 25	W 26	S 26		M 25	PAG	T 25		S 25				M 24	HARD CHEESE HOMO MILK
S 26		W 26	W 9	W 26	W 13	S 26				T 26		S 27		T 26		F 26		S 26		W 26	W 48	T 25	
M 27		T 27		T 27		S 27		M 26		T 27				W 27	W 35	S 27				M 27	ACIDITY	W 26	W 48
T 28	SOFT CHEESE	F 28		F 28				T 27		W 28	W 22	S 28		T 28		S 28		T 28	GOAT TOTAL FLORA	T 27		T 27	
W 29	W 5					M 28	CONC. WHEY DRIED MILK	W 28	W 22	T 29		S 29		F 29				W 29	W 44	S 29		S 29	
T 30		S 30		S 30		W 23	W 18	F 30		F 30				S 30		M 29	EWE RAW MILK BUTYRIC	T 30	W 44	S 30		S 30	
F 31								S 31				M 30				T 30	SOFT CHEESE	T 30				T 30	
		M 31	BUTTERMILK YOGURT / BUTY									T 31						F 31				W 31	W 1

**PT in microbiology:** PFMC: Pathogenic flora in cheese multi-criteria  
 PF5: Pathogenic flora in cheese 5 criteria  
 PF4: Pathogenic flora in cheese 4 criteria  
 PF3: Pathogenic flora in cheese 3 criteria  
 PF3 LISTERIA : Pathogenic flora in cheese 3 criteria "Listeria" PT Antibiotics : ANTIBIO

PLMC: Pathogenic flora in milk multi-criteria  
 PL5: Pathogenic flora in milk 5 criteria  
 PL4: Pathogenic flora in milk 4 criteria  
 BUTY : Butyric spores

**PT in chemistry:** CONC. WHEY: Concentrated whey  
 HARD CHEESE: Grated hard cheese  
 HOMO MILK: Homogenised milk  
 MIR MEDIAN: Mid infrared median range  
 MIR HIGH: Mid infrared high range

PHOSPH.: Phosphatase activity  
 PROC. CHEESE: Processed cheese

# PHYSICO-CHEMISTRY

The proficiency testings and criteria marked with an **\*** are covered by the « **accréditation n° 1-2473, comparaisons interlaboratoires, portée disponible sur [www.cofrac.fr](http://www.cofrac.fr) »/« n° 1-2473 accreditation, interlaboratory comparisons, scope available on [www.cofrac.fr](http://www.cofrac.fr) » and detailed scope available on [www.cecalait.fr](http://www.cecalait.fr).**

## I - PHYSICO-CHEMICAL PROFICIENCY TESTING ON RAW MILK

### • Analytes and methods:

- **fat determined using the Gerber method\***: 10 samples with fat varying from 15 to 49 g/l
- **fat determined using the Röse-Gottlieb method or alternative method (NMR)\***: 10 samples with fat varying from 14.5 to 48 g/kg
- **true protein determined using the amido black method\***: 10 samples with protein varying from 24 to 37 g/l
- **total and non-protein nitrogen\* determined using the Kjeldahl, Dumas or any other method:**
  - Total nitrogen: 10 samples with nitrogen varying from 3.5 to 6.5 g N/l
  - Non-protein nitrogen: 3 samples of milk (NPN about 0.2 to 0.3 g N/l)
  - 1 tryptophan solution
  - 1 glycine solution
  - 1 ammonium sulphate solution

} in which the nitrogen concentration is equivalent to that of milk
- **non-casein nitrogen determined using the Kjeldahl or any other method**: 5 samples with casein varying from 0.7 to 1.2 g N/l
- **lactose\* determined using any method**: 10 samples with lactose varying from 4.6 to 5.1 % + 1 lactose solution at a concentration equivalent to that of milk
- **freezing point determined using the cryoscopic method\***: 10 samples with freezing point varying from - 0.550 to - 0.480 °C + 2 standard NaCl solutions for calibration
- **dry matter\* (any method)**: 10 samples with dry matter varying from 10 to 15 %
- **urea\* (any method except infrared)**: 10 samples with urea varying from 100 to 700 mg/l
- **somatic cells\* for all methods used**: 10 samples containing between 50 000 and 1 600 000 cells/ml + 1 control sample

- **Number of samples:**
  - 1 set of 10 samples which are the same for the Gerber and amido black methods
  - 1 set of 10 samples which are the same for the Kjeldahl and Röse-Gottlieb methods
  - 1 set of 5 samples specific to the determination of casein
  - 1 set of 10 samples which are the same for the determination of dry matter and lactose, as well as cryoscopic measurements.
  - 1 set of 10 samples specific to the determination of urea
  - 1 set of 10 samples specific to the determination of somatic cells + 1 control sample

- **Packaging:**
  - 30 ml polyethylene screw-capped vials with airtight seals for casein, urea and somatic cells, as well as the solutions,
  - 60 ml polyethylene screw-capped vials with airtight seals for all the other criteria

- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 % and 0.05 % for somatic cells) (except for Kjeldahl and cryoscopic solutions)

- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times

- **Storage in the laboratory:** at 4 (± 2) °C.

- **Validity of the samples:** testing must be carried out 5 days after the date of dispatch for somatic cells and 10 days for the other criteria

### • Estimated calendar:

Sample dispatch	3 Mar 2025	2 Jun 2025	1 Sep 2025	1 Dec 2025
Return of results to ACTALIA Cecalait	17 Mar 2025	16 Jun 2025	15 Sep 2025	15 Dec 2025

**II - PHYSICO-CHEMICAL PROFICIENCY TESTING ON EWE RAW MILK****• Analytes and methods:**

- **fat determined using butyrometric method:** 6 samples with fat varying from 60 to 90 g/l
  - **fat determined using the Röse-Gottlieb method or any other method (NMR):** 6 samples with fat varying from 58 to 87 g/kg
  - **true protein determined using the amido black method:** 6 samples with protein varying from 45 to 65 g/l
  - **total and non-protein nitrogen determined using the Kjeldahl, Dumas or any other method:**
    - Total nitrogen: 6 samples with nitrogen varying from 6.5 to 10 g N/l
    - Non-protein nitrogen: 3 samples of milk (NPN about 0.2 to 0.3 g N/l)
    - 1 tryptophan solution
    - 1 glycine solution
    - 1 ammonium sulphate solution
- } in which the nitrogen concentration is equivalent to that of milk
- **freezing point determined using the cryoscopic method:** 6 samples with freezing point varying from - 0.550 to - 0.480 °C + 2 standard NaCl solutions for calibration
  - **dry matter (any method):** 10 samples with dry matter varying from 16 to 21 g/100 g

- Number of samples:**
  - 1 set of 6 samples which are the same for the Gerber and amido black methods
  - 1 set of 6 samples which are the same for the Kjeldahl and Röse-Gottlieb methods
  - 1 set of 6 samples which are the same for the determination of dry matter and cryoscopic measurements.
- Packaging:**
  - 60 ml polyethylene screw-capped vials with airtight
  - 30 ml polyethylene screw-capped vials with airtight for cryoscopic, nitrogen and non-protein nitrogen solutions
- Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %) (except for Kjeldahl and cryoscopic solutions)
- Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- Storage in the laboratory:** at 4 (± 2) °C.
- Validity of the samples:** testing must be carried out within 10 days after the date of dispatch
- Estimated calendar:**

<b>Sample dispatch</b>	24 Mar 2025	29 Sep 2025
<b>Return of results to ACTALIA Cecalait</b>	3 Apr 2025	9 Oct 2025

**III – PROFICIENCY TESTING ON PHOSPHATASIC ACTIVITY IN MILK**

- Analytes and methods:** **phosphatasic activity by fluorimetric, colorimetric, or alternative methods (quantitative or qualitative)**
- Number of samples:** 5 samples of milk, with phosphatasic activity values varying from 150 to 3000 mU/l
- Packaging:** 30 ml polyethylene screw-capped vials with airtight seals
- Preservative:** addition of colorless Bronopol to the samples (final concentration: 0.02 %)
- Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- Storage in the laboratory:** at 4 (± 2) °C.
- Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- Estimated calendar:**

<b>Sample dispatch</b>	10 Mar 2025	6 Oct 2025
<b>Return of results to ACTALIA Cecalait</b>	20 Mar 2025	16 Oct 2025

**IV – PROFICIENCY TESTING ON PHOSPHATASIC ACTIVITY IN CHEESE**

- Analytes and methods:** **phosphatasic activity by fluorimetric or alternative methods (quantitative or qualitative)**
- Number of samples:** 5 samples of cheese, with phosphatasic activity values varying from 0 to 5000 mU/g
- Packaging:** in 5 g of partial vacuum polyethylene bags

- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C.
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	7 Apr 2025
Return of results to ACTALIA Cecalait	17 Apr 2025

## V – PROFICIENCY TESTING ON ACIDITY IN MILK

- **Analytes and methods:** acidity in milk by colorimetric method or pH titration
- **Number of samples:** 5 samples of milk, with acidity values varying from 1.2 to 2.0 g of lactic acid/litre
- **Packaging:** 60 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of colorless Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C.
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	10 Mar 2025	27 Oct 2025
Return of results to ACTALIA Cecalait	20 Mar 2025	6 Nov 2025

## VI – PROFICIENCY TESTING ON CREAM♦

- **Analytes and methods:** fat♦ determined using the butyrometric and extraction method, dry matter♦ by drying
- **Number of samples:** one set of 10 samples for a fat method and/or dry matter, with fat varying from 20 to 45 g/100 g and dry matter varying from 27 to 51 g/100 g
- **Packaging:** 30 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C.
- **Validity of the samples:** testing must be carried out within 6 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	18 Feb 2025	13 May 2025	23 Sep 2025	18 Nov 2025
Return of results to ACTALIA Cecalait	26 Feb 2025	21 May 2025	1 Oct 2025	26 Nov 2025

## VII – PROFICIENCY TESTING FOR FAT IN HOMOGENISED MILK♦

- **Analytes and methods:** fat♦ by gravimetric and routine methods
- **Number of samples:** one set for any method of:
  - 5 skimmed milk samples with fat varying from 0 to 0.25 %
  - 5 semi-skimmed milk samples with fat varying from 1.2 to 1.8 %
  - 5 whole milk samples with fat varying from 2.8 to 3.5 %
- **Packaging:** 60 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch



## • Estimated calendar:

<b>Samples dispatch</b>	10 Feb 2025	10 Jun 2025	15 Sep 2025	24 Nov 2025
<b>Return of results to ACTALIA Cecalait</b>	19 Feb 2025	19 Jun 2025	24 Sep 2025	3 Dec 2025

**VIII – PROFICIENCY TESTING FOR LIPOLYSIS IN RAW MILK**♦

- **Analytes and methods:** lipolysis♦ by BDI method and copper soap (CSM) method or other methods
- **Number of samples:** 10 samples with free fatty acid content varying from 0.25 to 1.2 meq/100 g fat or from 0.15 to 0.50 meq/l of milk
- **Packaging:** 30 ml (CSM) and 60 ml (BDI) polyethylene screw-capped vials with airtight seals
- **Preservative:** pasteurisation, addition of colorless Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 (± 2) °C
- **Validity of the samples:** testing must be carried out within 6 days after the date of dispatch
- **Estimated calendar:**

<b>Sample dispatch</b>	18 Mar 2025	17 Jun 2025	16 Sep 2025	16 Dec 2025
<b>Return of results to ACTALIA Cecalait</b>	28 Mar 2025	27 Jun 2025	26 Sep 2025	26 Dec 2025

**IX - PROFICIENCY TESTING IN CHEESE****A) Soft cheese and uncooked hard cheese**♦

- **Analytes and methods:** dry matter♦ determined using any method, fat♦ determined using the butyrometric and gravimetric method, nitrogen♦ determined using the Kjeldahl method or any alternative method and chloride♦ determined using any method
- **Number of samples:** 6 samples with varying amounts of:
  - dry matter: 34 to 55 g/100 g
  - fat: 7 to 32 g/100 g
  - nitrogen: 2.5 to 4 g/100 g
  - chloride: 0.8 to 1.3 g/100 g
- **Packaging:** about 80 g in 120 ml polypropylene vials with locked lids
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 (± 2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

<b>Sample dispatch</b>	28 Jan 2025	15 Apr 2025	30 Sep 2025
<b>Return of results to ACTALIA Cecalait</b>	5 Feb 2025	23 Apr 2025	8 Oct 2025

**B) "Fromage frais"**♦

- **Analytes and methods:** dry matter♦ determined using any method, fat♦ determined using the butyrometric and gravimetric method, nitrogen♦ determined using any Kjeldahl method or any alternative method
- **Number of samples:** 6 samples with varying amounts of:
  - fat: 0.6 to 8 g/100 g
  - dry matter: 13 to 20 g/100 g
  - nitrogen: 0.8 to 1.2 g/100 g

- **Packaging:** about 80 g in 120 ml polypropylene vials with locked lids
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	24 Feb 2025	8 Sep 2025
Return of results to ACTALIA Cecalait	4 Mar 2025	16 Sep 2025

### C) Grated hard cheese

- **Analytes and methods:** dry matter<sup>♦</sup> determined using any method, fat<sup>♦</sup> determined using the butyrometric and gravimetric method, nitrogen<sup>♦</sup> determined using the Kjeldahl method or any alternative method, calcium<sup>♦</sup> and chloride<sup>♦</sup> determined using any method
- **Number of samples:** 6 samples with varying amounts of:
  - fat: 15 to 35 g/100 g
  - dry matter: 50 to 70 g/100 g
  - nitrogen: 3.5 to 5 g/100 g
  - chloride: 0.2 to 1.2 g/100 g
  - calcium: 0.6 to 1.1 g/100 g
- **Packaging:** in 70 to 80 g of partial vacuum polyethylene bags
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	19 May 2025	24 Nov 2025
Return of results to ACTALIA Cecalait	27 May 2025	2 Dec 2025

### D) Processed cheese

- **Analytes and methods:** dry matter determined using any method, fat determined using the butyrometric and gravimetric method, nitrogen determined using the Kjeldahl method or any alternative method, chloride determined using any method, and pH determined using any method
- **Number of samples:** 6 samples with varying amounts of:
  - dry matter: 30 to 42 g/100 g
  - fat: 1 to 25 g/100 g
  - nitrogen: 2.5 to 4 g/100 g
  - chloride: 0.8 to 1.3 g/100 g
  - pH: 5.4 to 5.7 units
- **Packaging:** about 85 g in 120 ml polypropylene vials with locked lids
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	17 Mar 2025	13 Oct 2025
Return of results to ACTALIA Cecalait	25 Mar 2025	21 Oct 2025

**X - PROFICIENCY TESTING ON DRIED MILK**

- **Analytes and methods:** moisture determined using any method, fat determined using the gravimetric and butyrometric method, nitrogen determined using the Kjeldahl method, and lactose determined using any method
- **Number of samples:** 6 samples with varying amounts of:
  - moisture: 2.5 to 5 g/100 g
  - fat: 0.5 to 30 g/100 g
  - nitrogen: 4 to 6 g/100 g
  - lactose: 35 to 55 g/100 g
 + 1 lactose solution at a concentration equivalent to that of milk
- **Packaging:** in 50 g vacuum aluminium bags
- **Dispatch:** in insulated box without ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at room temperature
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	28 Apr 2025	20 Oct 2025
Return of results to ACTALIA Cecalait	7 May 2025	29 Oct 2025

**XI - PROFICIENCY TESTING ON BUTTER**

- **Analytes and methods:** moisture determined using any method, non fat solids, fat determined using calculation or extraction method, fat acidity determined using any method, and pH determined using any method
- **Number of samples:**
  - 5 samples with varying amounts of:
    - moisture: 15 to 17 g/100 g
    - non fat solids: 1.5 to 2.5 g/100 g
    - fat: > 80 g/100 g
    - fat acidity: 0.5 to 1.5 meq/100 g
    - pH: 4.9 to 6.0 units
  - 1 control sample specific to fat acidity criterion
- **Packaging:**
  - tub or pack of about 250 g
  - in 30 ml polyethylene screw-capped vials with airtight seals for the control sample specific to fat acidity criterion
- **Dispatch:** in insulated boxes with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 (± 2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	24 Feb 2025	3 Nov 2025
Return of results to ACTALIA Cecalait	5 Mar 2025	12 Nov 2025

**XII - PROFICIENCY TESTING ON LIQUID BUTTERMILK**

- **Analytes and methods:** dry matter determined using any method, fat determined using the butyrometric and gravimetric method, nitrogen determined using the Kjeldahl method or any alternative method
- **Number of samples:** 5 samples with varying amounts of:
  - dry matter: 60 to 90 g/100 g
  - fat: 1 to 15 g/100 g
  - nitrogen: 2 to 5 g/100 g
- **Packaging:** 120 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated boxes with ice packs by express carrier. See page 6 for shipping times

- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	31 Mar 2025
Return of results to ACTALIA Cecalait	8 Apr 2025

### XIII – PROFICIENCY TESTING ON WHEY♦

- **Analytes and methods:** dry matter♦ determined using any method, fat♦ determined using the butyrometric and gravimetric method, nitrogen♦ determined using the Kjeldahl method or any alternative method
- **Number of samples:** 5 samples with varying amounts of:
  - dry matter: 50 to 70 g/kg
  - fat: 0 to 1 g/100 g
  - nitrogen: 0.5 to 1.5 g/kg
- **Packaging:** 120 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	24 Mar 2025	20 Oct 2025
Return of results to ACTALIA Cecalait	1 Apr 2025	28 Oct 2025

### XIV – PROFICIENCY TESTING ON CONCENTRATED WHEY

- **Analytes and methods:** dry matter determined using any method, fat determined using the butyrometric and gravimetric method, nitrogen determined using the Kjeldahl method or any alternative method
- **Number of samples:** 5 samples with varying amounts of:
  - dry matter: 250 to 350 g/kg
  - fat: 0.2 to 1 g/100 g
  - nitrogen: 0.5 to 1 g/100 g
- **Packaging:** 60 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 6 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	28 Apr 2025	17 Nov 2025
Return of results to ACTALIA Cecalait	8 May 2025	27 Nov 2025

**XV – PROFICIENCY TESTING ON DRIED WHEY**

- **Analytes and methods:** moisture determined using any method, fat determined using the butyrometric and gravimetric method, nitrogen determined using the Kjeldahl method, lactose determined using any method
- **Number of samples:** 6 samples with varying amounts of:
  - moisture: 1 to 5 g/100 g
  - fat: 0.5 to 2.5 g/100 g
  - nitrogen: 1.5 to 5 g/100 g
  - lactose: 60 to 85 g/100 g
 + 1 lactose solution at a concentration equivalent to that of milk
- **Packaging:** in 50 g vacuum aluminium bags
- **Dispatch:** in insulated box without ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at room temperature
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	17 Feb 2025	3 Nov 2025
Return of results to ACTALIA Cecalait	27 Feb 2025	13 Nov 2025

**XVI – PROFICIENCY TESTING ON RETENTATE**

- **Analytes and methods:** dry matter determined using any method, and total nitrogen determined using the Kjeldahl method or any alternative method
- **Number of samples:** 5 samples of skimmed retentate with varying amounts of:
  - dry matter: 12 to 18 g/100 g
  - total nitrogen: 9 to 16 g N/kg
- **Packaging:** 30 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 (± 2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	10 Feb 2025	13 Oct 2025
Return of results to ACTALIA Cecalait	19 Feb 2025	22 Oct 2025

**XVII – PROFICIENCY TESTING ON YOGURT / FERMENTED MILK**

- **Analytes and methods:** fat determined using the gravimetric method, and dry matter and titrable acidity determined using any method
- **Number of samples:** 6 samples with varying amounts of:
  - fat: 0.6 to 9 g/100 g
  - dry matter: 12 to 20 g/100 g
  - titrable acidity: 0.8 to 2 g/100 g
- **Packaging:** about 80 g in 120 ml polypropylene vials with locked lids
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 (± 2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	31 Mar 2025	6 Oct 2025
Return of results to ACTALIA Cecalait	8 Apr 2025	14 Oct 2025



## XVIII - PROFICIENCY TESTING ON INFANT FORMULA POWDER

- **Analytes and methods:** moisture determined using any method, fat determined using any method, nitrogen determined using any method, ashes, and lactose determined using any method
- **Number of samples:** 5 samples with varying amounts of:
  - moisture: 1 to 4 g/100 g
  - fat: 20 to 30 g/100 g
  - nitrogen: 1 to 3 g/100 g
  - ashes: 2 to 4 g/100 g
  - lactose : 30 to 60 g/100 g
  - + 1 lactose solution at a concentration equivalent to that of milk
- **Packaging:** in 50 g vacuum aluminium bags
- **Dispatch:** in insulated box without ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at room temperature
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	12 May 2025
Return of results to ACTALIA Cecalait	21 May 2025

## XIX – PROFICIENCY TESTING FOR MID INFRARED (MIR) SPECTROMETRY - MEDIAN RANGE OR HIGH RANGE

- **Analysers:** any analyser based on the principles described in ISO 9622|IDF 141 standard
- **Analytes:** fat, protein, lactose and dry matter
- **Number of samples:** 13 raw milk samples with amounts varying from:
 

<ul style="list-style-type: none"> <li>➤ <b>Median range:</b></li> <li>- fat: 1.9 to 5.4 %</li> <li>- protein: 2.1 to 4.1 %</li> <li>- lactose: 4.5 to 5.8 %</li> <li>- dry matter: 9.7 to 14.6 %</li> </ul>	OR	<ul style="list-style-type: none"> <li>➤ <b>High range:</b></li> <li>- fat: 5.8 to 8.7 %</li> <li>- protein: 4.4 to 6.3 %</li> <li>- lactose: 4.5 to 5.8 %</li> <li>- dry matter: 15.5 to 21.4 %</li> </ul>
--	----	---
- **Packaging:** 60 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** in insulated boxes with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 (± 2) °C
- **Validity of the samples:** testing must be carried out within 7 days after the date of dispatch
- **Estimated calendar - median range:**

Sample dispatch	3 Feb 2025	5 May 2025	8 Sep 2025	8 Dec 2025
Return of results to ACTALIA Cecalait	13 Feb 2025	15 May 2025	18 Sep 2025	18 Dec 2025

- **Estimated calendar - high range:**

Sample dispatch	14 Apr 2025	13 Oct 2025
Return of results to ACTALIA Cecalait	24 Apr 2025	23 Oct 2025

## XX - PROFICIENCY TESTING: DETECTION OF PREGNANCY-ASSOCIATED GLYCOPROTEINS (PAG) IN MILK

- **Analytes and methods** pregnancy-associated glycoprotein (PAG) using any commercial methods of detection
- **Number of samples:** 12 samples of milk (including negative and positive samples at different levels)
- **Packaging:** in 2 ml plastic tube
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)

- **Dispatch:** in insulated boxes with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 10 days after the date of dispatch
- **Estimated calendar:**

<b>Sample dispatch</b>	24 Feb 2025	25 Aug 2025
<b>Return of results to ACTALIA Cecalait</b>	6 Mar 2025	4 Sep 2025

## XXI – PROFICIENCY TESTING ON ACETONE / BETA-HYDROXYBUTYRATE (BHB) BY INFRARED METHOD

- **Analytes and methods:** acetone and beta-hydroxybutyrate (BHB) by infrared method
- **Number of samples:**
  - 1 set of 10 samples of milk for acetone varying from 0.10 to 0.40 mmoles/liter
  - 1 set of 10 samples of milk for beta-hydroxybutyrate (BHB) varying from 0.10 to 0.30 mmoles/liter
- **Packaging:** 30 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.04 %)
- **Dispatch:** in insulated boxes with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 4 ( $\pm$  2) °C
- **Validity of the samples:** testing must be carried out within 4 days after the date of dispatch
- **Estimated calendar:**

<b>Sample dispatch</b>	3 Mar 2025	1 Sep 2025
<b>Return of results to ACTALIA Cecalait</b>	13 Mar 2025	11 Sep 2025

# MICROBIOLOGY

The proficiency testings and criteria marked with an ♦ are covered by the « accréditation n° 1-2473, comparaisons interlaboratoires, portée disponible sur [www.cofrac.fr](http://www.cofrac.fr) »/« n° 1-2473 accreditation, interlaboratory comparisons, scope available on [www.cofrac.fr](http://www.cofrac.fr) » and detailed scope available on [www.cecalait.fr](http://www.cecalait.fr).

## I - PROFICIENCY TESTING ON TOTAL FLORA IN RAW MILK ♦

- **Flora:** microorganisms at 30 °C ♦, coliforms at 30 °C ♦ and enterobacteria ♦
  - **Methods:** free choice
  - **Number of samples:**
    - 10 samples containing between around:
      - 10 000 and 300 000 CFU/ml
      - 0 and 50 000 coliforms/ml
      - 0 and 50 000 enterobacteria/ml
    - 1 vial of water to control the temperature of the samples at reception
  - **Packaging:** 30 ml screw-capped vials with airtight seals
  - **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- CAUTION** no bacterial growth occurs in the undiluted sample with ready-to-use rehydratable medium (because of the bacteriostatic mixture). It is unnecessary to inoculate this undiluted sample
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
  - **Storage in the laboratory:** at 3 (± 2) °C
  - **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
  - **Estimated calendar:**

Sample dispatch	21 Jan 2025	4 Mar 2025	15 Apr 2025	3 Jun 2025	2 Sep 2025	2 Dec 2025
Return of results to ACTALIA Cecalait	31 Jan 2025	14 Mar 2025	25 Apr 2025	13 Jun 2025	12 Sep 2025	12 Dec 2025

## II – PROFICIENCY TESTING ON TOTAL FLORA IN GOAT RAW MILK ♦

- **Flora:** microorganisms at 30 °C ♦
  - **Methods:** free choice
  - **Number of samples:**
    - 10 samples containing between around 10 000 and 300 000 germs at 30 °C/ml.
    - 1 vial of water to control the temperature of the samples at reception
  - **Packaging:** 30 ml screw-capped vials with airtight seals
  - **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- CAUTION** no bacterial growth occurs in the undiluted sample with ready-to-use rehydratable medium (because of the bacteriostatic mixture). It is unnecessary to inoculate this undiluted sample
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
  - **Storage in the laboratory:** at 3 (± 2) °C
  - **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
  - **Estimated calendar:**

Sample dispatch	11 Feb 2025	13 May 2025	1 Jul 2025	28 Oct 2025
Return of results to ACTALIA Cecalait	21 Feb 2025	23 May 2025	11 Jul 2025	7 Nov 2025



### III – PROFICIENCY TESTING ON TOTAL FLORA IN EWE RAW MILK ♦

- **Flora:** microorganisms at 30 °C ♦
  - **Methods:** free choice
  - **Number of samples:**
    - 10 samples containing between around 10 000 and 300 000 germs at 30 °C/ml.
    - 1 vial of water to control the temperature of the samples at reception
  - **Packaging:** 30 ml screw-capped vials with airtight seals
  - **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- CAUTION** no bacterial growth occurs in the undiluted sample with ready-to-use rehydratable medium (because of the bacteriostatic mixture). It is unnecessary to inoculate this undiluted sample
- **Dispatch:** in insulated box with ice packs by express carrier. See page 6 for shipping times
  - **Storage in the laboratory:** at 3 (± 2) °C
  - **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
  - **Estimated calendar:**

Sample dispatch	17 Jun 2025
Return of results to ACTALIA Cecalait	27 Jun 2025

### IV – PROFICIENCY TESTING ON PATHOGENS

- We propose tests for the enumeration of *Listeria monocytogenes* in milk and cheese which must not be mistaken for tests for detection of *Listeria*.
  - The tests for the detection of *Salmonella* do not concern *Salmonella Typhi* and *Paratyphi*.
  - The enumeration of sulfite-reducing *Clostridium* spp., *Clostridium perfringens* and *Bacillus cereus* concerns **non-spore-forming bacteria**. The analysis must be carried out **without heat treatment**.
- In accordance with ISO 15213-1:2023, “ASR bacteria” is used if no confirmation step of characteristic colonies is carried out. If characteristic colonies are confirmed, the “*Clostridium* spp. sulfite-reducing agents” term is then applied.
- We draw your attention to the fact that we don’t contaminate our samples with collection strains but with strains isolated from dairy food matrices. Therefore, it is possible that some of them present unexpected phenotypic characteristics on some culture media.

### A) PATHOGENIC FLORA IN MILK

	Multi-criteria formula ♦	5 criteria formula ♦	4 criteria formula ♦
<i>Listeria</i> spp. (enumeration)			X
<i>Listeria monocytogenes</i> (enumeration)			X
<i>Listeria</i> (detection)	X	X	
<i>Salmonella</i> (detection)	X	X	X
Coagulase positive staphylococci (enumeration)	X	X	
<i>Escherichia coli</i> (enumeration)	X	X	
Enterobacteria (enumeration)			X
ASR / Sulfite-reducing <i>Clostridium</i> spp. (without thermisation) (enumeration)	X		
<i>Clostridium perfringens</i> (enumeration)	X		
<i>Bacillus cereus</i> (enumeration)	X	X	
Dates of dispatch	20 May 2025	4 Feb 2025 7 Oct 2025	9 Dec 2025

X X X: Samples dissociated from the other samples

**1) Multi-criteria formula**

- **Bacteria:** detection of *Listeria* and *Salmonella*, enumeration of coagulase positive *Staphylococci*, *Escherichia coli*, *Bacillus cereus*, *Clostridium perfringens* and ASR / sulfito-reducing *Clostridium* spp.
  - **Methods:** free choice
  - **Number of samples:**
    - 5 samples for the detection of:
      - *Listeria* in 25 ml of milk and identification of the species, included *Listeria monocytogenes*
      - *Salmonella* in 25 ml of milk
    - 5 samples containing between around:
      - 0 and 10 000 coagulase positive staphylococci/ml
      - 0 and 100 000 *Escherichia coli*/ml
      - 0 and 1 000 *Clostridium perfringens* (without thermisation)/ml
      - 0 and 1 000 ASR / sulfito-reducing *Clostridium* spp. (without thermisation)/ml
    - 5 samples containing between:
      - 0 and 30 000 *Bacillus cereus* (without thermisation)/ml
    - 1 vial of water to control the temperature of the samples at reception
  - **Packaging:**
    - five 60 ml screw-capped vials for the detection of *Listeria* and *Salmonella*
    - five 30 ml screw-capped vials with airtight seals, for the enumeration of *Staphylococci*, *Escherichia coli*, *Clostridium perfringens* and ASR / sulfito-reducing *Clostridium* spp.
    - five 30 ml screw-capped vials with airtight seals, for the enumeration of *Bacillus cereus*
  - **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution.**
- CAUTION** no bacterial growth occurs in the undiluted sample with ready-to-use rehydratable medium (because of the bacteriostatic mixture). It is unnecessary to inoculate this undiluted sample.
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
  - **Storage in the laboratory:** at 3 (± 2) °C
  - **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
  - **Estimated calendar:**

Sample dispatch	20 May 2025
Return of results to ACTALIA Cecalait	3 Jun 2025

**2) 5 criteria formula**

- **Bacteria:** detection of *Listeria* and *Salmonella*, enumeration of coagulase positive *Staphylococci*, *Escherichia coli*, and *Bacillus cereus*
  - **Methods:** free choice
  - **Number of samples:**
    - 5 samples for the detection of:
      - *Listeria* in 25 ml of milk and identification of the species, included *Listeria monocytogenes*
      - *Salmonella* in 25 ml of milk
    - 5 samples containing between around:
      - 0 and 10 000 coagulase positive staphylococci/ml
      - 0 and 100 000 *Escherichia coli*/ml
    - 5 samples containing between:
      - 0 and 30 000 *Bacillus cereus* (without thermisation)/ml
    - 1 vial of water to control the temperature of the samples at reception
  - **Packaging:**
    - five 60 ml screw-capped vials for the detection of *Listeria* and *Salmonella*
    - five 30 ml screw-capped vials with airtight seals, for the enumeration of *Staphylococci* and *Escherichia coli*
    - five 30 ml screw-capped vials with airtight seals, for the enumeration of *Bacillus cereus*
  - **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution.**
- CAUTION** no bacterial growth occurs in the undiluted sample with ready-to-use rehydratable medium (because of the bacteriostatic mixture). It is unnecessary to inoculate this undiluted sample.
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times

- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	4 Feb 2025	7 Oct 2025
Return of results to ACTALIA Cecalait	18 Feb 2025	21 Oct 2025

### 3) 4 criteria formula♦

- **Bacteria:** enumeration of *Listeria* spp.♦, *Listeria monocytogenes*♦, enterobacteria♦ (at low rate) and detection of *Salmonella*♦
  - **Methods:** For *Listeria* and *Salmonella*: free choice  
For Enterobacteria: a MPN method is recommended. For the enumeration on dishes, do not use ready-to-use rehydratable medium.
  - **Number of samples:**
    - 5 samples containing between around 0 and 10 000 *Listeria*/ml
    - 5 samples for the detection of *Salmonella* in 25 ml of milk
    - 5 samples containing between around 0 and 100 enterobacteria/ml
    - 1 vial of water to control the temperature of the samples at reception
  - **Packaging:**
    - five 30 ml vials for the enumeration of *Listeria* spp. including *Listeria monocytogenes* and/or enumeration of *Listeria monocytogenes*
    - five 60 ml vials for the detection of *Salmonella*
    - five 30 ml vials for the enumeration of enterobacteria

All come in screw-capped vials with airtight seals
  - **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- CAUTION** no bacterial growth occurs in the undiluted sample with ready-to-use rehydratable medium (because of the bacteriostatic mixture). Therefore do not use this type of medium for enterobacteria.
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
  - **Storage in the laboratory:** at 3 (± 2) °C
  - **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
  - **Estimated calendar:**

Sample dispatch	9 Dec 2025
Return of results to ACTALIA Cecalait	23 Dec 2025

## B) PATHOGENIC FLORA IN CHEESE

The fat content of the cheese to be analyzed is less than 20%

	Multi-criteria formula♦	4 criteria formula♦	5 criteria formula♦	3 criteria formula♦	3 criteria formula "Listeria"♦
<i>Listeria</i> spp. (enumeration)					X
<i>Listeria monocytogenes</i> (enumeration)					X
<i>Listeria</i> (detection)	X	X			X
<i>Salmonella</i> (detection)	X	X	X		
Coagulase positive staphylococci (enumeration)	X	X	X	X	
<i>Escherichia coli</i> (enumeration)	X	X	X	X	
Microorganisms at 30 °C (enumeration)	X		X	X	
Enterobacteria (enumeration)	X		X		
ASR / Sulfito-reducing <i>Clostridium</i> spp. (enumeration)	X				
<i>Clostridium perfringens</i> (enumeration)	X				
<i>Bacillus cereus</i> (enumeration)	X				
Dates of dispatch	11 Mar 2025 16 Sep 2025	24 Jun 2025 18 Nov 2025	14 Jan 2025	21 Oct 2025	8 Apr 2025

X X: Samples dissociated from the other samples

## 1) Multi-criteria formula

- **Bacteria:** detection of *Listeria* and *Salmonella*, enumeration of coagulase positive *Staphylococci*, *Escherichia coli*, microorganisms at 30 °C, enterobacteria, ASR / sulfito-reducing *Clostridium* spp., *Clostridium perfringens* and *Bacillus cereus*
- **Methods:** free choice
- **Number of samples:**
  - 5 samples containing between around:
    - absence or presence of *Listeria* in 25g of cheese and identification of the species, included *Listeria monocytogenes*
    - absence or presence of *Salmonella* in 25g of cheese
    - 0 and 10 000 coagulase positive staphylococci/g
    - 0 and 100 000 *Escherichia coli*/g
    - 10 000 and 500 000 microorganisms at 30 °C/g
    - 0 and 100 000 enterobacteria/g
    - 0 and 1 000 ASR / sulfito-reducing *Clostridium* spp. (without thermisation)/g
    - 0 and 1 000 *Clostridium perfringens* (without thermisation)/g
    - 0 and 30 000 *Bacillus cereus* (without thermisation)/g
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** about 100 g in 120 ml safety vials with locked lids
- **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	11 Mar 2025	16 Sep 2025
Return of results to ACTALIA Cecalait	25 Mar 2025	30 Sep 2025

## 2) 4 criteria formula

- **Bacteria:** detection of *Listeria* and *Salmonella*, enumeration of coagulase positive *Staphylococci* and *Escherichia coli*
- **Methods:** free choice
- **Number of samples:**
  - 5 samples containing between around:
    - absence or presence of *Listeria* in 25g of cheese and identification of the species, included *Listeria monocytogenes*
    - absence or presence of *Salmonella* in 25g of cheese
    - 0 and 10 000 coagulase positive staphylococci/g
    - 0 and 100 000 *Escherichia coli*/g
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** about 100 g in 120 ml safety vials with locked lids
- **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	24 Jun 2025	18 Nov 2025
Return of results to ACTALIA Cecalait	8 Jul 2025	2 Dec 2025

**3) 5 criteria formula**

- **Bacteria:** detection of *Salmonella*, enumeration of coagulase positive staphylococci, *Escherichia coli*, microorganisms at 30 °C and enterobacteria
- **Methods:** free choice
- **Number of samples:**
  - 5 samples for the detection of:
    - *Salmonella* in 25 g of cheese
  - 5 samples containing between around:
    - 0 and 10 000 coagulase positive staphylococci/g
    - 0 and 100 000 *Escherichia coli*/g
    - 10 000 and 500 000 microorganisms at 30 °C/g
    - 0 and 100 000 enterobacteria/g
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** about 100 g in 120 ml safety vials with locked lids
- **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	14 Jan 2025
Return of results to ACTALIA Cecalait	28 Jan 2025

**4) 3 criteria formula**

- **Bacteria:** enumeration of coagulase positive staphylococci, *Escherichia coli* and microorganisms at 30 °C
- **Methods:** free choice
- **Number of samples:**
  - 5 samples containing between around:
    - 0 and 10 000 coagulase positive staphylococci/g
    - 0 and 100 000 *Escherichia coli*/g
    - 10 000 and 500 000 microorganisms at 30 °C/g
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** about 100 g in 120 ml safety vials with locked lids
- **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	21 Oct 2025
Return of results to ACTALIA Cecalait	4 Nov 2025

**5) 3 criteria "Listeria" formula**

- **Bacteria:** enumeration of *Listeria* spp., *Listeria monocytogenes* and detection of *Listeria*
- **Methods:** free choice

- **Number of samples:**
  - 5 samples containing between around 0 and 10 000 *Listeria*/g
  - 5 other samples for the detection of *Listeria* in 25 g of cheese and identification of the species, included *Listeria monocytogenes*
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** about 100 g in 120 ml safety vials, with locked lids
- **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 3 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	8 Apr 2025
Return of results to ACTALIA Cecalait	22 Apr 2025

### V – PROFICIENCY TESTING ON BUTYRIC CLOSTRIDIUM SPORES IN RAW MILK

- **Methods:** free choice, a MPN method is recommended
- **Number of samples:**
  - 10 samples containing between around 0 and 10 000 spores/l
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** sterile 60 ml screw-capped vials with airtight seals
- **Preservative:** samples without preservative, storage between at 3 (± 2) °C
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 4 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	6 Jan 2025	31 Mar 2025	29 Sep 2025	3 Nov 2025
Return of results to ACTALIA Cecalait	20 Jan 2025	14 Apr 2025	13 Oct 2025	17 Nov 2025

### VI – PROFICIENCY TESTING ON YEASTS AND MOULDS IN FRESH DAIRY PRODUCTS

- **Bacteria:** enumeration of yeasts AND moulds
- **Methods:** free choice
- **Number of samples:**
  - 5 samples containing between around 0 and 10 000 yeasts and/or moulds / g
  - 1 vial of water to control the temperature of the samples at reception
- **Packaging:** about 50 g in 120 ml safety vials with locked lids
- **Preservative:** storage at 3 (± 2) °C, with a bacteriostatic mixture preventing any bacterial growth in the milk, but **rendered inactive upon dilution**
- **Dispatch:** in certified IATA secondary packaging (biohazard), in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 (± 2) °C
- **Validity of the samples:** analyses must be carried out within 4 days after the date of dispatch
- **Estimated calendar:**

Sample dispatch	17 Mar 2025	22 Sep 2025
Return of results to ACTALIA Cecalait	31 Mar 2025	6 Oct 2025

# ANTIBIOTICS

## PROFICIENCY TESTING - DETECTION OF ANTIBIOTICS IN MILK

- **Methods:** any method used by the laboratories, particularly the wide range detection tests of all antibiotics and/or the more specific tests for the detection of  $\beta$ -lactams or tetracyclines
- **Number of samples:** 10 freeze-dried samples containing or not different quantities of various classes of antibiotics, to be reconstituted in 5 ml of water according to the procedure supplied
- **Preservative:**
  - at 3 ( $\pm$  2) °C before reconstitution
  - at 3 ( $\pm$  2) °C after reconstitution and must be used within 4 hours; samples can be frozen
- **Packaging:** 10 ml glass vials with cap and steel capsule
- **Dispatch:** in insulated box with ice by express carrier. See page 6 for shipping times
- **Storage in the laboratory:** at 3 ( $\pm$  2) °C
- **Validity of the samples:** analyses must be carried out within 9 days after the date of dispatch
- **Estimated calendar:**

<b>Sample dispatch</b>	17 Feb 2025	19 May 2025	22 Sep 2025	17 Nov 2025
<b>Return of results to ACTALIA Cecalait</b>	27 Feb 2025	29 May 2025	2 Oct 2025	27 Nov 2025

# SECONDARY REFERENCE MATERIALS (SRMs)

## - General information -

### 1) The samples

#### a. Nature and number

The nature and the number of our standard reference materials (SRMs) have been defined to meet the requested objectives:

- Calibrate and/or adjust the instruments
- Control the methods

#### b. Quality control

The homogeneity and the stability of the samples were tested and validated at the time of the adjustment of each type of SRM. For some of them, a homogeneity control is systematically carried out for each production.

#### c. Determination of the reference values

The reference values of the standard reference materials are determined by many expert laboratories using standardised methods, who most of them are accredited on the criteria concerned. In some cases, the values can also be confirmed using instrumental methods (infrared for example). These information are specified in the results sheet.

*Note: The expert laboratories which define the reference values of the standard reference materials are evaluated each year by the Actalia Cecalait Quality Surveillance Committee on their performance in the proficiency testings and their results taking into account for the determination of SRMs reference values.*

### 2) Sending, reception and storage of the samples

#### a. Sending of the samples

The samples are sent by express carrier according to the terms described for each SRM in this 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.**

**Generally, the following provisions apply:**

- Check the availability of the reference values in your member area before analysing samples
- Conservation: from 2 to 5 semaines après la fabrication. The deadline of use is clearly indicated on the reference values report of each SRM.
- Storage:
  - for physico-chemistry: at positive cold at  $4 (\pm 2) ^\circ\text{C}$ , except for the dried samples at room temperature, and the lipolysis stability samples at  $-20 ^\circ\text{C}$ .
  - for microbiology: at positive cold at  $3 (\pm 2) ^\circ\text{C}$  and in the dark.
- **Never keep any open samples** for a later use.

### 3) Communication with the client laboratories

Communication with participants is done through the member area of the website [www.cecalait.fr](http://www.cecalait.fr), 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**

Clients are informed of their sending by e-mail to the address declared to ACTALIA Cecalait for this use.

**b. Sending of the reference values**

A report specifying the reference values per sample (accompanied in the majority of cases by the associated uncertainty) is put on the member area of our website. Clients are informed of their availability by e-mail to the address declared to ACTALIA Cecalait for this use.

2024

ESTIMATED CALENDAR OF STANDARD REFERENCE MATERIALS - 2025

REMINDER: Standard reference materials samples are sent during the estimated week

DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER			
S 1		W 1		S 1		S 1		T 1	Röse-Gottlieb Gerber / Cryo	T 1		S 1		T 1	Röse-Gottlieb Gerber / Cryo	F 1	Microorg 30°C E. coli -Staph	M 1		W 1	Dry matter Ewe fat Stability lipo	S 1		M 1			
		T 2	Dry matter Ewe fat Stability lipo	S 2		S 2		W 2	Dry matter Ewe fat Stability lipo	F 2	Microorg 30°C E. coli -Staph			W 2	Dry matter Ewe fat Stability lipo	S 2		T 2		T 2	Dry matter Ewe fat Stability lipo	S 2		T 2		M 2	
M 2		F 3	Microorg 30°C E. coli -Staph					T 3	Stability lipo	S 3				T 3	Stability lipo	S 3		W 3	W 36	F 3	Microorg 30°C E. coli -Staph			W 3	W 49	M 2	
T 3		S 4		M 3		M 3		F 4	Microorg 30°C E. coli -Staph	S 4				F 4	Microorg 30°C E. coli -Staph			T 4		S 4				T 4		T 4	
W 4	W 49	S 5		T 4	W 6 Cheese Butter Dried milk Dried whey	T 4	W 10	S 5		M 5		W 4	W 23	S 5		M 4	W 32 Cheese Butter Dried milk Dried whey Acetone/BHB	F 5		S 5		M 3	W 45 Cheese Butter Dried milk Dried whey Acetone/BHB	T 4		F 5	
T 5		M 6		W 5		W 5		S 6		T 6	W 19 Cheese Butter Dried milk Dried whey Acetone/BHB			S 6		T 5		S 6		M 6		W 5		T 5		S 6	
F 6		T 7	W 2 Cheese Butter Dried milk Dried whey	T 6		T 6		M 7		W 7		W 7		S 7		T 7		W 6		S 7		T 6	W 41 Cheese Butter Dried milk Dried whey Acetone/BHB	F 7		S 7	
S 7		W 8		F 7		F 7		T 8	W 15 Cheese Butter Dried milk Dried whey Acetone/BHB	T 8		S 8		M 7	W 28 Cheese Butter Dried milk Dried whey Acetone/BHB	F 8		T 7		M 8		W 8		S 8		M 8	
M 9		T 9		S 8		S 8		W 9		F 9		W 9		W 9		S 9		T 8	W 28 Cheese Butter Dried milk Dried whey Acetone/BHB	M 8	W 37 Cheese Butter Dried milk Dried whey Acetone/BHB	W 8		T 9		T 9	W 50 Cheese Butter Dried milk Dried whey Acetone/BHB
T 10		F 10		M 10		M 10		T 10		S 10		M 9		T 10		S 10		W 10		T 9	W 37 Cheese Butter Dried milk Dried whey Acetone/BHB	F 10		W 10		W 10	
W 11	W 50	S 11		T 11	W 7 IR median Urea Eq. FPD by IR Acetone/BHB	T 11	W 11 Cheese Butter Dried milk Dried whey Acetone/BHB	F 11		S 11		W 11	W 24 Cheese Butter Dried milk Dried whey Acetone/BHB	F 11		M 11		T 10	W 24 Cheese Butter Dried milk Dried whey Acetone/BHB	W 10	W 37 Cheese Butter Dried milk Dried whey Acetone/BHB	S 11		M 10		T 11	
T 12		S 12		W 12		W 12		S 12		M 12		T 12		S 12		T 12	W 33 IR median Urea Eq. FPD by IR	F 12		T 11		S 12		T 11		F 12	
F 13		M 13		T 13	W 7 IR median Urea Eq. FPD by IR Acetone/BHB	T 13	W 11 Cheese Butter Dried milk Dried whey Acetone/BHB	S 13		W 14	W 20 IR median Urea Eq. FPD by IR	F 13		S 13		M 13		T 12	W 33 IR median Urea Eq. FPD by IR	F 12		W 12		T 13	W 46 IR median Urea Eq. FPD by IR	S 13	
S 14		T 14	W 3 IR median Urea Eq. FPD by IR Acetone/BHB	F 14		F 14		M 14		T 15		S 14		M 14		T 14		F 13		M 13	W 42 IR median Urea Eq. FPD by IR	F 14		T 13	W 46 IR median Urea Eq. FPD by IR	S 14	
M 16		W 15		S 15		S 15		W 16	W 16 IR median Urea Eq. FPD by IR	F 16		S 15		T 15	W 29 IR median Urea Eq. FPD by IR	S 16		F 14		W 15		S 16		T 14	W 42 IR median Urea Eq. FPD by IR	M 15	
T 17	W 51 IR median Urea Eq. FPD by IR	T 16		M 17		M 17		T 17		S 17		W 16		F 16		S 17		F 15		T 16	W 38 IR median Urea Eq. FPD by IR	F 17		T 15		W 17	W 51
W 18		S 18		W 19	W 8 Amido black IR high BDI / MSC Fatty acids Retentate Cream Stability FA	W 19	W 12 IR median Urea Eq. FPD by IR	F 18		S 18		T 19	W 25 IR median Urea Eq. FPD by IR	S 18		M 18		S 17		W 17	W 38 IR median Urea Eq. FPD by IR	S 18		M 17	W 47 Amido black IR high BDI / MSC Fatty acids Retentate Cream Stability FA	T 18	
T 19		S 19		T 20		T 20		S 19		M 19	W 21 Amido black IR high BDI / MSC Fatty acids Retentate Cream Stability FA	T 19		W 18	W 25 IR median Urea Eq. FPD by IR	M 18	W 34 Amido black IR high BDI / MSC Fatty acids Retentate Cream Stability FA	T 18		T 18		S 19		T 18	W 47 Amido black IR high BDI / MSC Fatty acids Retentate Cream Stability FA	F 19	
F 20		M 20	W 4 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	F 21		F 21		M 21		W 21		T 20		S 19		W 20		T 19	W 34 Amido black IR high BDI / MSC Fatty acids Retentate Cream Stability FA	S 20		M 20	W 43 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability FA	T 20		W 19	
S 21		W 22		S 22		S 22		T 22	W 17 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	T 22		F 20		S 21		W 21		F 20		W 21	W 30 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	F 21		T 21		S 21	
M 23		T 23		M 23		M 23		W 23		F 23		S 22		T 21		W 20		T 21		T 22	W 30 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	S 23		T 22		M 22	
T 24	W 52 Amido black IR high / Cream Somatic cells BDI / MSC Fatty acids Retentate Stability cell Stability FA	F 24		T 24		T 24		M 24		S 24		W 23		S 22		W 22		S 24		F 22		T 23	W 39 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	T 23		W 23	
W 25		S 25		M 24	W 9 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Somatic cells Stability cell Stability lipo	M 24	W 13 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	F 25		T 24	W 26 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	T 24		S 24		W 23		T 24		W 24	W 39 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	F 24		T 24		W 24	
T 26		M 27	W 5 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Stability lipo	T 25		T 25		S 26		W 25		T 25		S 25		W 24		T 25		W 25	W 39 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	S 25		T 25		W 25	
F 27		T 28	Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Stability lipo	W 26		W 26		S 27		T 26	W 22 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat / Cells Stab cell / lipo	T 26		S 26		W 25		T 26		W 26	W 39 Amido black IR high Somatic cells BDI / MSC Fatty acids Retentate Cream Stability cell Stability FA	S 26		T 26		W 26	
S 28		W 29		F 28	W 9 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Stability lipo	F 28		M 28	W 18 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Stability lipo	W 28		T 27		S 27		W 26		T 27		W 27	W 35 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Somatic cells Stability cell Stability lipo	S 27		T 27		W 27	
S 29		T 30	Microorg 30°C E. coli -Staph	S 29		S 29		W 29		T 28		W 27		S 28		W 27		T 28		W 28	W 35 Kjeldahl Röse-Gottlieb Gerber / Cryo Dry matter Ewe fat Somatic cells Stability cell Stability lipo	S 28		T 28		W 28	
M 30	W 1 Kjeldahl Röse-Gottlieb Gerber / Cryo	W 30		T 30		T 30		F 30	Microorg 30°C E. coli -Staph	S 31		T 29		W 29		W 28		F 29	Microorg 30°C E. coli -Staph	T 29	W 40 Kjeldahl Röse-Gottlieb Gerber / Cryo	W 29		T 29		W 29	
T 31		F 31		M 31	W 14 Kjeldahl	M 31		S 31		M 30	W 14 Kjeldahl	T 30		W 30		W 29		S 30		T 30	W 40 Kjeldahl Röse-Gottlieb Gerber / Cryo	W 30		T 30		W 30	W 1

Stability cell: stability - counting of somatic cells in milk  
 Stability FA: stability - fatty acids in milk  
 Stability lipo: stability - lipolysis in milk

Fatty acids: calibration and control fatty acids  
 BDI: fat acidity - BDI method  
 MSC: fat acidity - copper soap method  
 Cryo: freezing point by cryoscopy

IR median: infrared median range  
 IR high: infrared high range  
 Eq. FPD by IR: equivalent freezing point by infrared

Microorg 30°: microorganisms at 30 °C  
 E. coli - Staph: Escherichia coli - coagulase positive staphylococci

# PHYSICO-CHEMISTRY

## I - CALIBRATION SRMs

### 1) Determination of true protein in milk by amido black method

- **Purpose:** calibration of spectrophotometers designed for the determination of **TRUE PROTEIN** in raw cows', goats' and ewes' milk, with or without preservative (Note: only Bronopol and mercuric chloride can be used as preservatives)
- **Nature of SRMs:**
  - ↳ **Set no. 1: cows' or goats' milk (3 samples):** 1 inseparable group of:
    - 2 reconstituted samples, one rich in protein ( $R \approx 36$  g/kg), the other poor ( $P \approx 25$  g/kg).
    - 1 control sample (whole raw milk containing 30-32 g protein/kg).
 The calibration of the method should be linear and is fitted through two points R and P.
  - ↳ **Set no. 2: cows' or goats' milk (4 samples):** 1 inseparable group of:
    - 3 reconstituted samples, one rich in protein ( $R \approx 36$  g/kg), one medium ( $M \approx 30$  g/kg), the other poor ( $P \approx 25$  g/kg).
    - 1 control sample (whole raw milk containing 30-32 g protein/kg).
 The additional median point is useful to detect a possible linearity defect and to correct it by a curvilinear fitting.
  - ↳ **Set no. 3: ewes' milk and high contents milk:** 1 inseparable group of:
    - 3 reconstituted samples, one rich in protein ( $R \approx 65$  g/l), one medium ( $M \approx 55$  g/l), the other poor ( $P \approx 45$  g/l).
    - 1 control sample (whole raw milk containing 54-56 g protein/l).
- **Preservative:** SRMs are preserved with mercuric chloride (0.07 %) for the reconstituted milk samples and Bronopol (0.02 %) for the control sample of set no. 3
- **Packaging:** in 30 ml screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:**
  - set no. 1 and no. 2: determined by many expert laboratories using the NF V 04-216 amido black method and checked by a group of expert laboratories using the ISO 8968-1 and 4 | IDF 20-1 and 4 Kjeldahl method.
  - set no. 3: determined by a group of expert laboratories using the NF V 04-216 amido black method and checked by a group of expert laboratories using the ISO 8968-1 and 4 | IDF 20-1 and 4 Kjeldahl method.
 The results obtained with these amido black SRMs are equivalent to what would be found with the Kjeldahl method [(TN-NPN) x 6.38]
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

### 2) Counting of somatic cells in milk

- **Purpose:**
  - ↳ **calibration and adjustment of all automatic instruments** for counting somatic cells in cows', goats' and ewes' milk
  - ↳ **and to control visual counting methods**
  - ↳ **reference for CMT estimation** (Connecticut Mastitis Test or Teepol test).

*NB: during calibration, it is necessary to take into account the possible bias due to a different type of preservative*

• **Nature of SRMs:**

		Number of samples of cows' milk reconstituted with proportional blends of a bulk milk with a high somatic cell count and a milk with a low somatic cell count, and a milk with no cells:									
		0	200 000	400 000	600 000	800 000	1 000 000	1 200 000	1 400 000	1 600 000	1 800 000
Set no. 1 «low range»	30 ml	2	2	2	2	2					
	60 ml	1	1	1	1	1					
Set no. 2 «high range "cow"»	30 ml	2					2	2	2	2	
	60 ml	1					1	1	1	1	
Set no. 3 «full range "cow"»	30 ml	4	2	2	2	2	2	2	2	2	
	60 ml	2	1	1	1	1	1	1	1	1	
Set no. 4 «high range "goat"»	30 ml	2						2	2	2	2
	60 ml	1						1	1	1	1
Set no. 5 «full range "goat"»	30 ml	4	2	2	2	2		2	2	2	2
	60 ml	2	1	1	1	1		1	1	1	1
Set no. 6 «extended range»	30 ml	4	2	2	2	2	2	2	2	2	2
	60 ml	2	1	1	1	1	1	1	1	1	1

- **Preservative:** addition of Bronopol to the samples (final concentration: 0.1 %)
- **Packaging:** in 30 ml or 60 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice by express carrier. See page 6 for shipping times
- **Standard values:** determined according to the method ISO 13366-2|IDF 148-2 using instruments connected to the CRM certified international reference standard
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	9	13	17	22	26	30	35	39	43	48

**3) Determination of freezing point in milk by cryoscopic method**

- **Purpose:** calibration and adjustment of all instruments for measuring the freezing point of milk.
- **Nature of SRMs:**

Freezing point values						
	Number of sodium chloride solutions prepared in compliance with ISO 5764 IDF 108:					Number of whole bulk milk samples:
	S1 -483 °C	S2 -512 °C	S3 -541 °C	S4 -408 °C	S5 -600 °C	L -520 °C
Set no. 1	1	1	1			
Set no. 2	1	1	1			1
Set no. 3		1		1	1	
Set no. 4		1		1	1	1
Set no. 5	1	1	1	1	1	
Set no. 6						4
Set no. 7		4				

- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %). The sodium chloride solutions contain no preservative
- **Packaging:** in 30 ml screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by:
  - solutions: NaCl concentrations and control by cryoscopic analysis
  - milk: cryoscopic analysis according to ISO 5764|IDF 108 method (plateau seeking) performed by a group of expert laboratories

- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48

#### 4) Determination of milk fat acidity by copper soap method

- **Purpose:** calibration and adjustment of the copper soap method utilised in milk
- **Nature of SRMs:** 1 inseparable group of 4 samples of whole pasteurised milk, with a medium composition and with fat acidity concentrations adjusted to around 0.16 meq/l, 0.28 meq/l, 0.40 meq/l and 0.52 meq/l
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results obtained by an expert laboratory using the BDI method (ISO/TS 22113|IDF 204) and confirmed by a group of expert laboratories using the copper soap method. They are expressed in meq/l of milk

- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

#### 5) Determination of urea in milk

- **Purpose:** calibration and adjustment of any method for the determination of urea, except infrared
- **Nature of SRMs:** 1 inseparable group of 5 samples of whole milk with urea concentrations varying from 150 to 900 mg urea/l
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results obtained by a group of expert laboratories using the differential pH-metric enzymatic method. Results are expressed in mg urea/l of milk (ISO 14637|IDF 195)

- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	51(24)	3	7	12	16	20	25	29	33	38	42	46

**6) Fatty acids in milk**

- **Purpose:** calibration and adjustment of infrared methods for the determination of fatty acids
- **Nature of SRMs:** 1 inseparable group of 5 samples of milk with various fatty acids concentrations
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 60 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results obtained by a group of expert laboratories using the gas chromatography method. Results are expressed in g fatty acids/l of milk for saturated fatty acids, unsaturated fatty acids, mono-unsaturated fatty acids, poly-unsaturated fatty acids, De novo fatty acids, Mixed fatty acids, Preformed fatty acids, C4:0, C6:0, C8:0, C10:0, C12:0, C14:0, C14:1 total, C16:0, C16:1 total, C17:0, C18:0, C18:1 9c, C18:1 total C18:2 total and C18:3 n-3 parameters

• **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

**7) Acetone**

- **Purpose:** calibration and adjustment of infrared analysers
- **Nature of SRMs:** 1 inseparable group of 5 samples of milk with various acetone contents from 0.10 to 0.20 mmoles/liter
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.04 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results obtained by an expert laboratory using the continuous flow chemical method. Results are expressed in mmoles/l and confirmed by a group of expert laboratories using the infrared method

• **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	3	7	11	15	19	24	28	32	37	41	45	50

**8) BETA-HYDROXYBUTYRATE (BHB)**

- **Purpose:** calibration and adjustment of infrared analysers
- **Nature of SRMs:** 1 inseparable group of 10 samples of milk with various beta-hydroxybutyrate (BHB) contents from 0.10 to 0.28 mmoles/liter
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.04 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results obtained by an expert laboratory using the continuous flow chemical method. Results are expressed in mmoles/l and confirmed by a group of expert laboratories using the infrared method

• Estimated calendar of dispatches ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	3	7	11	15	19	24	28	32	37	41	45	50

## II - CONTROL SRMs

### 1) Determination of total nitrogen and non-protein nitrogen in milk

- **Purpose:** control of the Kjeldahl method or the Dumas method
- **Nature of samples:**
  - ↳ Tryptophan solutions (for controlling the digestion step, Kjeldahl method).
  - ↳ Ammonium sulphate solutions (for testing the distillation and titration step, Kjeldahl method)
  - ↳ Whole homogenised UHT milk samples (for testing the global accuracy on the routinely analysed product).

	Number of tryptophan solutions at about 5.6 g N/l	Number of ammonium sulphate at about 5.6 g N/l	Number of whole homogenised UHT milk samples at about 5.0 g N/l
<b>Set no. 1</b> (without NPN determination in milk)	1	1	2
<b>Set no. 2</b> (with NPN determination in milk)	1	1	4
<b>Set no. 3</b> (without NPN determination in milk)			4
<b>Set no. 4</b> (with NPN determination in milk)			6
<b>Set no. 5</b>		4	
<b>Set no. 6</b>	4		

- **Preservative:** the two solutions contain no preservative  
Addition of Bronopol to the milk samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:**
  - solutions: true values.
  - milk: determined by the results of a group of expert laboratories, for total nitrogen (TN) and non protein nitrogen (NPN) (ISO 8968-1 and 4|IDF 20-1 and 4)
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Week</b>	1	5	9	14	18	22	27	31	35	40	44	48

### 2) Determination of fat in milk by Röse-Gottlieb method

- **Purpose:** control of the accuracy of the gravimetric methods or alternative methods for determination of fat.
- **Nature of SRMs:** 1 inseparable group of 4 samples of whole homogenised UHT milk containing about 35 g fat/kg
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories (ISO 23318|IDF 249)
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Week</b>	1	5	9	14	18	22	27	31	35	40	44	48

**3) Determination of butyrometric fat in ewe milk**

- **Purpose:** control of the accuracy of fat determinations by the butyrometric method
- **Nature of SRMs:** 1 inseparable group of 4 samples of whole raw ewe milk
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml screw-capped polyethylene vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories (NF V 04-155)
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48

**4) Determination of fat in milk by Gerber method**

- **Purpose:** control of the accuracy of fat determinations by Gerber method
- **Nature of SRMs:** 1 inseparable group of 4 samples of whole raw bulk milk
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml screw-capped polyethylene vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories (ISO 19662|IDF 238)
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48

**5) Determination of dry matter in milk by gravimetric method**

- **Purpose:** control of the accuracy of gravimetric methods for the determination of dry matter in milk
- **Nature of SRMs:** 1 inseparable group of 4 samples of whole milk containing about 12-13 g of total solids/100 g
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml screw-capped polyethylene vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using the reference method (ISO 6731|IDF 21)
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48



**6) Milk fat acidity by BDI method**

- **Purpose:** control of the accuracy of the BDI method
- **Nature of SRMs:** 1 inseparable group of 4 samples of whole pasteurised milk, with a medium composition, and with concentrations of free fatty acids adjusted to around 1 meq/100 g fat
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 60 ml polyethylene screw-capped vials with airtight seals.
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of an expert laboratory using the BDI method (ISO/TS 22113|IDF 204). They are expressed in meq/100 g fat
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

**7) Fatty acids in milk**

- **Purpose:** control of the determination of fatty acids methods
- **Nature of SRMs:** 1 inseparable group of 4 samples of milk, with a medium composition of fatty acids
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 60 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using the gas chromatography method. Results are expressed in g fatty acids/l of milk for saturated fatty acids, unsaturated fatty acids, mono-unsaturated fatty acids, poly-unsaturated fatty acids, De novo fatty acids, Mixed fatty acids, Preformed fatty acids, C4:0, C6:0, C8:0, C10:0, C12:0, C14:0, C14:1 total, C16:0, C16:1 total, C17:0, C18:0, C18:1 9c, C18:1 total C18:2 total and C18:3 n-3 parameters
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

**8) Control samples in cheese**

- **Purpose:** control of the accuracy of dry matter, fat, nitrogen and chloride analysis in cheese
- **Nature of SRMs:** 1 sample of processed cheese containing about:
  - dry matter: 45 g/100 g
  - fat: 30 g/100 g
  - nitrogen: 2 g/100 g
  - chloride: 0.4 g/100 g
- **Packaging:** a 200 g tub for all the criteria
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** mean of the results of a group of expert laboratories using:
  - oven method for dry matter (ISO 5534|IDF 4),
  - SBR method for fat (ISO 23319|IDF 250),
  - Kjeldahl method for nitrogen (ISO 8968-1|IDF 20-1),
  - a potentiometric method for chlorides (ISO 5943|IDF 88 or automated method)

- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	2	6	11	15	19	24	28	32	37	41	45	50

## 9) Control samples in butter

- **Purpose:** control of the accuracy of moisture, non fat solids, fat by calculation, fat acidity and salt analysis in butter
- **Nature of SRMs:**
  - 1 sample of unsalted butter containing approximately:
    - moisture: 16 g/100 g
    - non fat solids: 2 g/100 g
    - fat: 82 g/100 g
    - fat acidity: 0.5 meq/100 g of fat
  - 1 sample of salted butter containing about:
    - salt (in NaCl): 2 g/100 g
- **Packaging:** about 250 g of unsalted butter and about 250 g of salted butter
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using:
  - oven method for moisture (ISO 3727-1|IDF 80-1),
  - ISO 3727-2|IDF 80-2 for non fat solids,
  - ISO 3727-3|FIL 80-3 for fat by calculation
  - ISO 1740|IDF 6 for fat acidity,
  - a potentiometric method (ISO 15648|IDF 179, ISO 1738|IDF 12 or automated method) for salt.

- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	2	6	11	15	19	24	28	32	37	41	45	50

## 10) Control samples in dried milk

- **Purpose:** control of the accuracy of determination of moisture, fat, and nitrogen analysis in dried milk
- **Nature of SRMs:** 1 sample of dried milk containing about:
  - moisture: 4 g/100 g
  - fat: 25 g/100 g
  - nitrogen: 4 g/100 g
- **Packaging:** in a 50 g vacuum aluminium bag for all the analytes
- **Dispatch:** monthly and on request, in insulated box without ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using:
  - oven method (IDF 26A:1993 / ISO 5537|IDF 26 / NF V04-348) for moisture,
  - Röse-Gottlieb method (ISO 23318|IDF 249) for fat,
  - Kjeldahl method (ISO 8968-1|IDF 20-1) for nitrogen

- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	2	6	11	15	19	24	28	32	37	41	45	50

**11) Control samples in retentate**

- **Purpose:** control of the accuracy of dry matter and total nitrogen analysis in retentate
- **Nature of SRMs:** 1 inseparable group of 4 samples of skimmed retentate containing about:
  - dry matter: 15 to 17 g/100 g
  - total nitrogen: 13 to 15 g N/kg
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using the ISO 6731|IDF 21 and ISO 8968-1|IDF 20-1 methods
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

**12) Control samples in dried whey**

- **Purpose:** control of the accuracy of determination of moisture, fat and nitrogen analysis in dried whey
- **Nature of SRMs:** 1 sample of dried whey containing about:
  - moisture: 2 g/100 g
  - fat: 1 g/100 g
  - nitrogen: 2 g/100 g
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in a 50 g vacuum aluminium bag for all the analytes
- **Dispatch:** monthly and on request, in insulated box without ice packs, by express carrier See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using:
  - oven method (ISO 5537|IDF 26) for moisture,
  - Röse-Gottlieb method (ISO 23318|IDF 249) for fat,
  - Kjeldahl method (ISO 8968-1|IDF 20-1) for nitrogen
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	2	6	11	15	19	24	28	32	37	41	45	50

**13) Control samples in cream**

- **Purpose:** control of determination of fat and dry matter analysis in cream
- **Nature of SRMs:**
  - 1 inseparable group of 4 samples of non homogenised pasteurised cream containing about 30 to 36 g fat/100 g for fat criteria using acido-butyrometric method
  - 1 inseparable group of 4 samples of non homogenised pasteurised cream containing about 30 to 36 g fat/100 g for fat criteria using extraction method
  - 1 inseparable group of 4 samples of non homogenised pasteurised cream containing about 35 to 45 g dry matter/100 g for dry matter criteria
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals

- **Dispatch:** monthly and on request, in insulated box with ice packs, by express carrier See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using:
  - acido-butyrometric method (ISO 19660 | IDF 237) and extraction method (ISO 23318 | IDF 249) for fat,
  - oven method (ISO 6731 | IDF 21) for dry matter.

• **Calendrier prévisionnel d'envoi des échantillons :**

CALENDRIER PREVISIONNEL D'ENVOI DES ECHANTILLONS												
Mois d'envoi	Jan	Fév	Mar	Avr	Mai	Juin	Juil	Août	Sept	Oct	Nov	Déc
<b>Semaine</b>	52(24)	4	8	13	17	21	26	30	34	39	43	47

### III - CONTROL AND PRECALIBRATION SRMs

#### 1) Infrared on milk

- **Possible use:**
  - ↗ **control** of the global adjustment of the instrument (slope and mean deviation) and internal settings (linearity and intercorrections for MLRs only),
  - ↗ **“simple” precalibration of the instrument:** adjustment of the final ( $y = b.X+a$ ).
  - ↗ **“complete” precalibration of the instrument:** adjustment of the crossed correction factors from the raw signal and the final equation ( $y = b.X+a$ ) for the MLR prediction models

Note: An adjustment of the bias of the instrument using milks representative of the milks analyzed is **absolutely necessary** after an adjustment using the precalibration samples.
- **Analysers:** any analyser based on the principles described in ISO 9622|IDF 141
- **Analytes:** fat, protein, lactose, dry matter
- **Number of samples:** 1 inseparable group of 13 raw milk samples with amounts varying from:
 

<ul style="list-style-type: none"> <li>➤ <b>Median range:</b></li> <li>- fat: 1.9 to 5.4 %</li> <li>- protein: 2.1 to 4.1 %</li> <li>- lactose: 4.5 to 5.8 %</li> <li>- dry matter: 9.7 to 14.6 %</li> </ul>	<b>OR</b>	<ul style="list-style-type: none"> <li>➤ <b>High range:</b></li> <li>- fat: 5.8 to 8.7 %</li> <li>- protein: 4.4 to 6.3 %</li> <li>- lactose: 4.5 to 5.8 %</li> <li>- dry matter: 15.5 to 21.4 %</li> </ul>
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- **Packaging:** 60 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of an expert laboratory and checked by a FTIR analyser, using the following methods:
  - acido-butyrometric method for fat (ISO 19662|IDF 238 for median range and NF V 04-155 for high range)
  - amido black method for protein (NF V 04-216)
  - Kjeldahl method for NPN (ISO 8968-4|IDF 20-4)
  - enzymatic method for lactose (ISO 26462|IDF 214)
  - oven method for dry matter (ISO 6731|IDF 21).
- **Estimated calendar of dispatches**

#### MID INFRARED SRMs - [MEDIAN RANGE](#)

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Week</b>	51(24)	3	7	12	16	20	25	29	33	38	42	46

#### MID INFRARED SRMs - [HIGH RANGE](#)

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Week</b>	52(24)	4	8	13	17	21	26	30	34	39	43	47

#### 2) Equivalent freezing point in milk by infrared (FPD)

- **Possible use:**
  - ↗ **control** of the simple linear regression slope
  - ↗ **precalibration:** adjustment of the final equation of the instrument ( $y = b.X+a$ ).

After an adjustment using precalibration samples, an adjustment of the instrument bias with representative milk samples is necessary
- **Analysers:** any analyser based on the principles described in ISO 9622|IDF 141
- **Number of samples:** 1 inseparable group of 11 raw milk samples with amounts varying from -0.470 et -0.590°C

- **Packaging:** 60 ml polyethylene screw-capped vials with airtight seals
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using the cryoscopic method (plateau seeking) according to ISO 5764|IDF 108 method
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Week</b>	51(24)	3	7	12	16	20	25	29	33	38	42	46

## IV – CONTROL OF STABILITY SRMs

### 1) Counting of somatic cells in milk

- **Purpose:** control of the **stability of milk somatic cell count analysers**. The reference values are not supplied. The target values must be determined when the samples are received
- **Nature of samples:** 1 inseparable group of 2 milk samples, one without somatic cells, the other with a somatic cell count around 500 000 cells/ml
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.1 %)
- **Packaging:** in 30 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	9	13	17	22	26	30	35	39	43	48

### 2) Lipolysis in milk

- **Purpose:** control of the **stability of infrared analysers for the determination of the lipolysis in milk**. The reference values are not supplied. The target values must be determined when the samples are received
- **Nature of samples:** 1 inseparable group of 35 pasteurised milk samples, whose the fat acidity was adjusted to about 0.40 – 0.45 meq/l
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %) and freezing before dispatch
- **Packaging:** in 60 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request (the sending date depends on the supplying of negative cold), in insulated box at negative cold by express carrier. See page 6 for shipping times
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48

### 3) Fatty acids in milk

- **Purpose:** control of the **stability of infrared analysers for the determination of fatty acids in milk**. The reference values are not supplied. The target values must be determined when the samples are received
- **Nature of samples:** 1 inseparable group of 25 milk samples
- **Preservative:** addition of Bronopol to the samples (final concentration: 0.02 %)
- **Packaging:** in 60 ml polyethylene screw-capped vials with airtight seals
- **Dispatch:** monthly and on request, in insulated box with dry ice packs by express carrier. See page 6 for shipping times
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	52(24)	4	8	13	17	21	26	30	34	39	43	47

# MICROBIOLOGY

## CONTROL SRMs

### 1) "Enumeration of micro-organisms at 30 °C"

- **Purpose:** control of the **accuracy of the enumeration of micro-organisms at 30 °C**
- **Nature of SRMs:** 1 inseparable group of 4 freeze-dried samples to be reconstituted according to the procedure supplied (total count about 100 000 CFU/ml after reconstitution) and 4 tubes of diluent. Final volume: 9 ml
- **Storage in laboratory:** - at 3 ( $\pm$  2) °C before reconstitution  
- to store in the dark  
- to be used immediately after reconstitution
- **Packaging:** 10 ml glass vials with cap and steel capsule and 9 ml tubes of diluent
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using ISO 4833-1 method
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48

### 2) "Enumeration of micro-organisms: *Escherichia coli* and coagulase positive staphylococci"

- **Purpose:** control of the **accuracy of the enumeration of *E. coli* and coagulase positive staphylococci**
- **Nature of SRMs:** 1 inseparable group of 4 freeze-dried samples to be reconstituted according to the procedure supplied (total count about 1 000 CFU/ml *E. coli* and 1 000 CFU/ml coagulase positive staphylococci after reconstitution) and 4 tubes of diluent. Final volume: 9 ml
- **Storage in laboratory:** - at 3 ( $\pm$  2) °C before reconstitution  
- to store in the dark  
- to be used immediately after reconstitution
- **Packaging:** 10 ml glass vials with cap and steel capsule and 9 ml tubes of diluent
- **Dispatch:** monthly and on request, in insulated box with ice packs by express carrier. See page 6 for shipping times
- **Standard values:** determined by the results of a group of expert laboratories using ISO 16649-2 for *E. coli* and ISO 6888-2 method for coagulase positive staphylococci
- **Estimated calendar of dispatches**

ESTIMATED CALENDAR OF DISPATCHES												
Month of dispatch	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Week	1	5	9	14	18	22	27	31	35	40	44	48



## The services proposed to the dairy analyses laboratories

### Analytical expertise

→ Expertise and control of dairy analyses (organisation of interlaboratory proficiency tests & supply of standard reference materials),

→ Training, audit, technical assistance... to improve the analytical performance (new tests, organisation of the laboratory, quality management, etc).

### Technical information

→ Supply of a list of bibliographic references from a search in the ACTALIA Cecalait database concerning dairy analysis techniques,

→ Supply of documents selected in the ACTALIA Cecalait database.

### News bulletins

→ Regulatory, legislative and normative watch: monthly by e-mail,

→ Cecalait's Newsletter: quaterly by e-mail.



## Agroalimentary expertise center

ACTALIA is born in 2013 by the merging of two technical institutes, Actilait and Adria Normandie, to provide an enhanced expertise in the food sector and an international scope.

### ACTALIA is organised around 8 centres of expertise



### A multidisciplinary team of 180 collaborators

[www.actalia.eu](http://www.actalia.eu)

Certified « Agro-industry Technical Institute (AITI) by the Ministry of Agriculture and food, ACTALIA is then recognised for its mission of general interest.



# GENERAL TERMS AND CONDITIONS OF SALE AND EXECUTION OF SERVICES

In agreement between the parties, ACTALIA's "general terms and conditions of sale and execution of services" (hereafter designated "General terms") govern the contractual relations between the parties.

ACTALIA undertakes to provide the services in accordance with the present "General terms" and consequently, all the offers or submissions of service and all the contracts, conventions or other agreements resulting from this will be governed by the present "General terms", except for formal and explicit dispensation figuring in the quote or proposal transmitted to the client. The latter abandons any clause defined in their general terms of purchase which are contradictory to the following "General terms".

## 1 – Object – General Clauses

ACTALIA acts on behalf of the person or body issuing the instructions by virtue of which they intervene (hereafter designated the "client"). No other party has the right to give them instructions, particularly concerning the scope of the intervention or the issuance of reports, unless authorised by the "Client".

ACTALIA carries out sampling, audits, studies, research, valuations, technical assistance missions, measurements, commissioned analyses and tests, on request by its "Clients". ACTALIA can subcontract the execution of all or part of the services agreed upon with its "Client".

A proposal or quote for technical services established by ACTALIA constitutes the special terms modifying and completing the present "General terms". The validity of the offer is fixed in these special terms and the contract is concluded for the duration stipulated therein.

## 2 – Obligations of ACTALIA

ACTALIA will provide the services in accordance with:

- The specific written instructions of the "Client", accepted by ACTALIA,
- The terms of the contract review, accepted by the "Client",
- The methods that ACTALIA consider appropriate according to the technical constraints, operational and/or financial
- 

ACTALIA undertakes, throughout the duration of and after the termination of the present contract, not to disclose any of the information obtained concerning the activity of the "Client", unless explicitly authorised by the latter. ACTALIA's personnel is subject to a confidentiality clause concerning the information relative to the reasons motivating the collaboration between the parties, the contents of the mission entrusted to ACTALIA, the results obtained for the "Client" and their internal management. The present confidentiality clause can be drawn up separately on request by the "Client". Unless explicitly requested by the latter, ACTALIA reserves the right to disclose the name of the "Client" or their company name as a reference in its marketing documents.

## 3 – Obligations of the "Client"

The "Client" must:

- Ensure that sufficient instructions and information are given in due time to ACTALIA to allow them to execute the requested services,
- Provide sufficient access for ACTALIA's representatives in order to execute the requested services,
- Inform ACTALIA beforehand of all known effective or potential risks and dangers associated with every order, sample, or control, such as the presence of radiation, or toxic materials or elements.
- Fulfil all their obligations resulting from the sales contract concerned, failing this ACTALIA will thus be released of all obligations with regards to the "Client".

## 4 – Samples and products subject to testing and analyses

The "Client" is responsible for the conformity and representativeness of the samples and products used for the execution of the services.

Except in particular cases where the sampling is carried out by ACTALIA, the "Client" must, free of charge, provide ACTALIA with all the samples and products necessary for the service to be carried out. Delivery charges are at the cost of the "Client".

For the further dispatch of samples or products on written request (email, post or fax), the transport costs, insurance and packaging are over and above the agreed price.

For sensory tests carried out on samples and products supplied by the "Client", the latter undertakes to guarantee their harmlessness and to inform ACTALIA Sensoriel if the samples and products require compulsory information on the labels concerning specific treatments such as ionisation, irradiation, GMO, etc. Furthermore, on delivery the "Client" will communicate the use-by date, the best before date or the fabrication date of the samples and products if the information is not on the package.

Samples and products can be delivered from Monday to Friday during business hours to the different addresses of ACTALIA, except in specific cases agreed upon beforehand between ACTALIA and the "Client".

## 5 – Financial conditions, postponement or cancellation

For payment of services performed, ACTALIA will perceive the sums of which the amount and the conditions of settlement are fixed in the special terms that appear on the quote or the service proposal. The prices indicated are ex VAT. A special discount can be agreed upon exceptionally according to the volume of work ordered or the special terms of fulfilment. The services are carried out in the order of the registration of the orders. However, certain orders can be exceptionally dealt with expediently subject to an additional charge for urgency.

ACTALIA reserves the right to issue an invoice for a down payment of 30 % at the start of the mission. The settlement is effected by the "Client" 30 days following the date of invoice, net and without rebate. For late payments, the "Client" will owe by rights a lump sum of 40 euros for costs and recouvrement and a penalty charge calculated on the remaining amount owed and resulting from the application of a rate equivalent to 3 times the legal interest rate. If necessary, the execution of the service or the issuing of a document can be subordinate to the prior payment of an amount that may attain the integrality of the price under the terms of the contract.

For any unilateral request by the "Client" to postpone or cancel a contract concerning an intervention mobilizing ACTALIA's resources (test in a pilot plant or in a factory, consulting, training, sensory analysis, etc.) to take effect, written confirmation must be sent by post, fax or email. Except in the case of absolute necessity (events beyond the control of the parties such as strikes, a fire...), any cancellation or postponement not foreseen arising at the time of the contract less than two weeks before the date fixed for the start of the contract could result in the "client" being charged 15 % of the total cost under the terms of the contract. In the case of cancellation or postponement requested less than 48 hours before the arranged date, the "client" could be charged 25 % of the total cost under the terms of the contract.

## 6 – Guarantee, limitation of liability

The "Client" is sole responsible for the implementation of the recommendations, the destination of the service or the exploitation of the results obtained.

ACTALIA undertakes to implement the means detailed in the proposition as far as the technological and consultancy or valuation missions are concerned, or the outputs of results as far as the analyses are concerned. ACTALIA can only be held responsible in the case of proven negligence.

In the case where ACTALIA expresses reservations about possible insufficiencies concerning the analyses requested, it cannot be held responsible if the request is maintained by the "Client".

In the event of ACTALIA being liable, whatever the cause, the domain or the nature, that the damages be material or immaterial, it will be limited to direct and immediate damages linked to ACTALIA's service, with the payment of damages by ACTALIA not exceeding the amount ex VAT of the price agreed upon in the order in connection with which the client suffered damages.

## 7 – Settlement of disputes

The address of service, for ACTALIA, is its administrative establishment. The present "General terms" as well as the contracts concluded with the "Client" are governed by French law. Any dispute that cannot be settled out of court will be the exclusive competence of the court having jurisdiction over ACTALIA's administrative establishment, and this even in the case of plurality of defenders.

ACTALIA, a non profit organisation.

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