

INSTRUCTIONS FOR USERS ON HANDLING AND PREPARATION OF MILK SAMPLES FOR PROFICIENCY TESTING

Be sure to use impermeable gloves when handling the samples!

The supplied milk samples are intended exclusively for laboratory use!

Remains of samples after analysis must be removed harmlessly!

When receiving the package if you notice any damage on the parcel or mechanical impurities in the samples please take photos of them if possible and immediately send a complaint with the photos to e-mail rlm@agr.hr.

Milk samples for chemical analyzes (and determination of the number of somatic cells) were preserved with bronopol in concentration of 0.02 %.

Milk samples for microbiological analyzes were preserved with a specific preservative in a concentration of 27.5 mg/100 mL.

Milk samples for determination of freezing point, detection of antibiotics, pH, titratable acidity, alcohol test and density are not preserved.

The samples of milk for determining the freezing point are not preserved and are delivered frozen.

Milk samples for determining the total number of bacteria (CFU) using the classic horizontal method are preserved and delivered frozen.

Milk samples for the determination of the total number of bacteria (IBC) by the instrumental method of flow cytometry are preserved and delivered in a frozen state.

1. MILK SAMPLES SENT TO USERS IN LIQUID STATE

1.1. Preserved milk samples

Preserved samples must be kept at a temperature in the range of 4 to 15°C during the entire time of transport. Upon receipt, samples should be immediately refrigerated (4 to 8°C). If, upon receipt, the temperature of the samples is higher than 15°C, they should be immediately refrigerated and the technical manager of **RL** should be notified at the contact below. The temperature of the samples should be measured only in the delivered bottle with water.

Analyze the samples no later than the date specified in the notification sent to users by e-mail.

Prepare the samples for analysis according to the requirements of the corresponding ISO standard for a specific analysis.

The number of measurements of each component in the same sample should be equal to the number of measurements you perform in your routine analyses.

1.2. Non-preserved milk samples

Non-preserved samples must be kept at a temperature in the range of 4 to 8°C during the entire time of transport. If, upon receipt, the temperature of the samples is higher than 8°C they should be immediately placed in the refrigerator (4 to 8°C) and the technical manager of **RL** should be contacted at the contact listed below.

The temperature of the samples should be measured only in the delivered bottle with water.

Analyze the samples immediately upon receipt.

Prepare the samples for analysis according to the requirements of the corresponding ISO standard for a specific analysis.

The number of measurements of each component in the same sample should be equal to the number of measurements you perform in your routine analyses.

2. MILK SAMPLES SENT TO USERS IN A FROZEN STATE

Milk samples that are sent in a frozen state (using the shock freezing method) must be completely frozen during the entire transport. Upon receiving the samples, the user must store them in a freezer at -20°C until analysis.

If upon receiving the samples it is noticed that they have started to thaw, the user must immediately analyze the samples.

2.1.1. Samples thawing

- Remove the frozen samples from the freezer and place them in a water bath heated to a temperature of 40 to 43°C . The sample must stand in a water bath until they are completely dissolved.
- Remove the samples from the water bath and mix them slowly.
- Analyze the samples according to the procedure for a particular method.

Visual check:

If there is a sediment of milk components on the bottom, walls or under the cap of the bottle, it should be dissolved by slow mixing.

Warning: the presence of sediment of milk components does not mean that the sample is of poor quality.

If the sample contains particles created by flocculation, the sample should be additionally placed in a water bath for 5 minutes and then gently stirred.

Warning: If particles formed by flocculation are still present in the sample, it is possible that the sample was damaged during storage for the following reasons: - the thawed sample was refrozen, - the sample storage temperature was not in the range of -18 up to -20°C .

Analyze the samples no later than the date specified in the notification sent to users by e-mail.

Prepare the samples for analysis according to the requirements of the corresponding ISO standard for a specific analysis.

The number of measurements of each component in the same sample should be equal to the number of measurements you perform in your routine analyses

The results of the analysis of the samples for the proficiency test must be entered in the appropriate forms that can be downloaded from the [RL](http://rlm.agr.hr/) website: <http://rlm.agr.hr/> under "Proficiency test (PT)". If you are unable to download the forms from the website, let us know and we will send them to you by e-mail.

Filled out forms for entering analysis results should be sent by e-mail to rlm@agr.hr.

If you have any questions or complaints related to the samples submitted for the proficiency test, you can contact us by phone at +385-1-2393-904 or by e-mail at rlm@agr.hr.

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