القيادة العامة للقوات المسلحة الأردنية - الجيش العربي

JORDAN ARMED FORCES -ARAB ARMY

Military Laboratories For Quality Control – Proficiency Testing Session

Tuesday , May 7 | 12:10 PM – 12:30 PM

AOAC – Arab Section, Second Meeting HOUSEKEEPING ITEM

This meeting is being recorded

Please mute your lines and unmute only when speaking

Introduction

➤ Thank you for participating in the **Program of Military Laboratories For Quality Control / Proficiency Testing   Provider (PTP).**

➤ We hope that your participation will be beneficial to your laboratory, as well as enjoyable.

➤ We would like to welcome any new participants to the Programme.

MILITARY LABORATORIES FOR QUALITY C
PROFICIENCY TESTING DEPART
ISO7043:2023

What is a Proficiency Testing Scheme?

A Proficiency Testing Scheme (**PTS**) is the practice of testing samples of unknown values sent from an external PT scheme.

These samples are shipped to a laboratory at least once throughout the year.

The samples are analysed within a specified time frame by testing personnel who must treat them like a routine sample. Once the samples have been tested, results are sent to the **PTS** for evaluation.

The evaluated results are sent back to the laboratory in a report that compares the results obtained with the actual results and compares your laboratory to other laboratories using identical or similar method

Department **Technical**	Military Laboratories for Quality Control Proficiency Testing Department Proficiency Testing schedule Plan.	No.	P/PTP/05
		Revision No.	00
		Date	01-01-2024

Year	2023-2024					
PT schedule plan						
Sr. no.	Proficiency test items	Analyte / Parameter	Test method	Participation fees in JD	Last date of registration	Last date of results submission	PT Report release date
1.0 Food Chemistry							
1.	Milk and Milk products / powdered milk. PT Scheme Name: **PT 5** PT Scheme Code: MLQC/MILPC/01	Acidity % (As Lactic Acid)	ISO 6091 or Any comparable method	160 JD	20-1-2024 20-10-2024	28-2-2024 28-11-2024	16-3-2024 16-12-2024
		Moisture Content %	ISO 5537 or Any comparable method				
		Total Fat Content	ISO 23318 or Any comparable method				
		Total Nitrogen Content %	ISO 8968-1 or Any comparable method				
2.	Milk and milk products/ cheese. PT Scheme Name: **PT 5** PT Scheme Code: MLQC/MILPC/02	Total Fat Content %	ISO 3433or Any comparable	160 JD	20-5-2024	28-6-2024	16-7-2024
		Nitrogen Content %	ISO 8968-1 or Any comparable method				
		Acidity % (As Lactic Acid)	ISO 6091 or Any comparable method				
			ISO 5534 or Any				

12.	Cosmetics and Detergents / PT Fabric softener PT Scheme Name: **PT 6** Scheme Code: MLQC/DFSC/03	PH Content #	Aany comparable method	100 JD	20-3-2024	28-4-2024	16-5-2024
		Active Matter Content (Cationic Content) %	ISO 2871-1 or Any comparable method				
13.	Cosmetics and Detergents / detergents laundry liquid washing fabric. PT Scheme Name: **PT 6** Scheme Code: MLQC/DWFC/04	PH # 1% Dilution.	Any comparable method	100 JD	20-8-2024	20-9-2024	16-10-2024
		Active Matter Content%	Any comparable method				
	Cosmetics and Detergents / Hair conditioner	PH Content #	Any comparable method	D	2024	2024	2024

GENERAL ENROLMENT REQUIREMENTS

Laboratories must enrol at each round basis.

E-mail dap-tech1@jaf.mil.jo to enrol.

General Enrol :-

1. Application for Registration .
2. Enrol on the relevant **PTS**
3. Payment Via Account –Jordan Army .
4. Cancellations/Refunds Cancellations, refunds and/or adjustments after enrolments and orders been Processed will be handled on a case by case basis. All requests must be submitted in writing to dap-tech1@jaf.mil.jo .
5. Changes to existing **PT** scheme enrolments All must be forwarded to, dap-tech1@jaf.mil.jo , at the **MLQC** no later than two weeks prior to the scheduled sample shipping date.

Participation .

Participation of the MLQC/PTD Proficiency Testing Schemes is open to all laboratories. Private laboratories, both local and international may participate.

SHIPMENTS AND RECEIPT OF SAMPLES .

MLQC/PTD schemes outsource the shipping of samples to courier companies that comply with the IATA regulations.
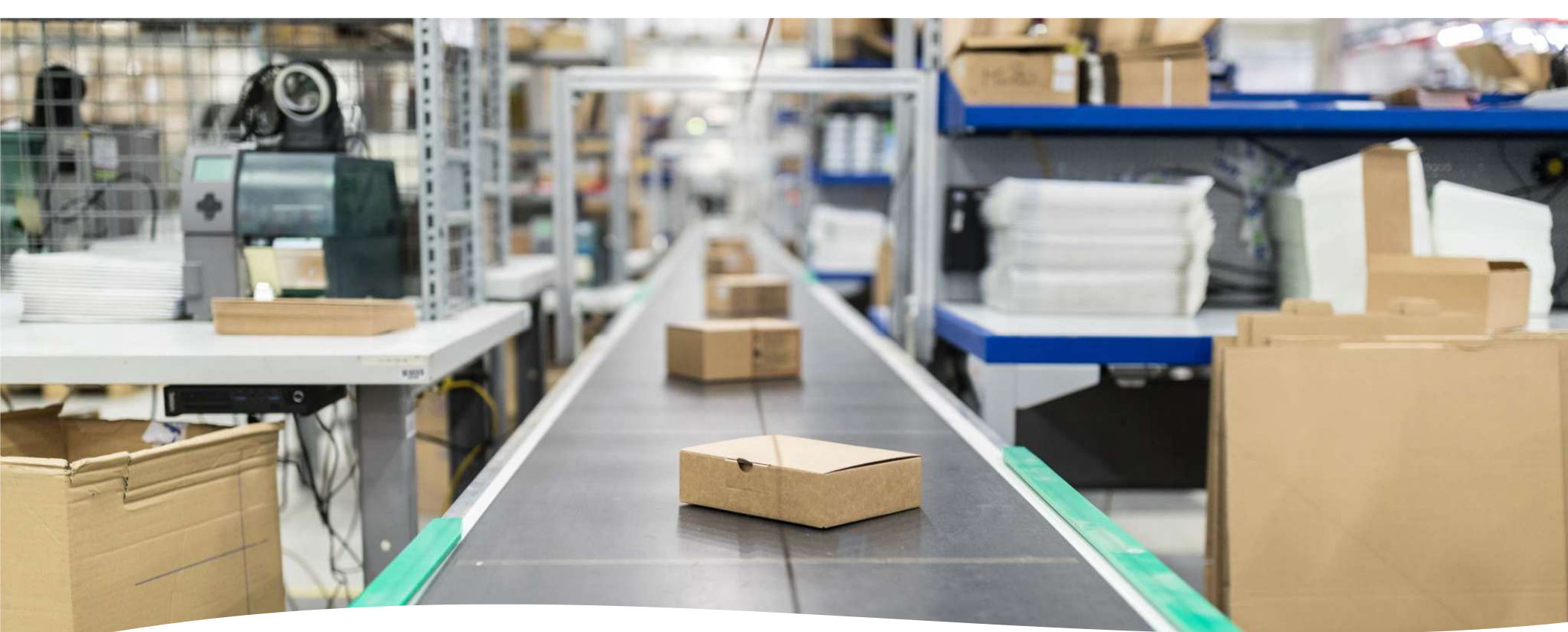
Samples that fall under the UN3373 Category B Hazardous samples are shipped with a special courier that complies with IATA regulations

Packaging .

Specimens are transported in IATA 650 compliant packaging All packaging complies with the IATA Dangerous Goods Regulations.

Your subscription package should include the following items:

- Unique Sample code .
- Master copies of results sheets , instruction sheets , receipt delivery note
- Label on sample with general information (due dates for submission of results , PT CODE , PT Scheme Name ....etc) .

Receipt of Samples

- Inspect contents of package immediately on arrival in the laboratory (Breakages, possible deterioration during transportation...etc) .
- Store the samples as per storage instructions until the samples are tested.
- Verify that all samples are present (no duplicate or missing samples).
- Inspect for sample integrity (adequate volume, cracked or leaking, etc.).
- Verify package received corresponds with your enrolment and shipping schedule.

➤ Contact Scheme Manager/Coordinator within 5 working days after receipt of samples OR if samples have not been received

➤ If there are any issues after inspecting package contents replacement samples are available.

➤ Actions to be taken if sample was not received Should you not receive your PT samples contact the Scheme Manager/Coordinator within 5 working days post the shipment date. A "tracking of parcel" will then be instituted with the courier company and the participant will be duly informed of the findings.

17 pack

Product Code :
Item Code :(   )
Matrix :
Approx. Size :
Product Date :
Start-Date :
Start-Date :(R   )
Recommended Storage :

Comment :
test has shortened timescale for analysis and/or returning results.

Water
100%
NATURAL

Comments :
test has short
timescale for
and/or return

Milk
100%
NATURAL

de :
(   )
e :
):
(R   ):
ded Storage :

Sample transportation and storage

Proficiency testing scheme material is transported at ambient (18°C-25°C) temperature and on arrival in your laboratory . Keep it as instruction condition
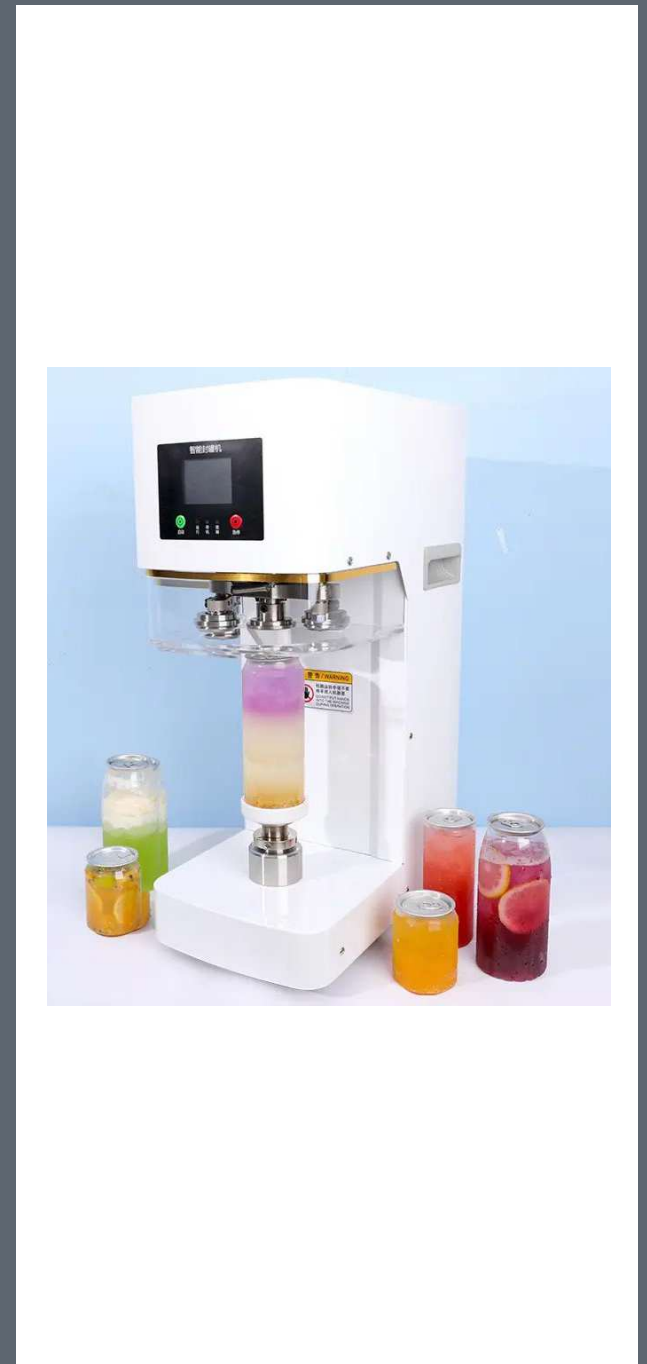
Refer to the relevant PTS instructions for proper storage requirements e.g. either between 2 – 8 ºC or room temperature before examination.

Identify a separate storage space for already analysed PT samples to decrease the possibility of a mix-up with current PT samples.

PROFICIENCY TESTING SAMPLES

- Selection of sample
- Samples included in the **MLQC/PTD - PTS** are characterized on a selection of methods to ensure that a correct interpretation of final result is attained

- The period between prepare and during distribution samples until result submission are subjected to one or more of the following processes to ensure suitability:
    - Quality control
    - Characterization
    - Verification processes
- All laboratories shall receive a selection of identical samples.

Product Code :
Item Code : ( )
Matrix :
Approx. Size :
Product Date :
Start-Date :
Start-Date : (R)
Recommended Storage :

Comment :
test has shortened timescale for analysis and/or returning results.

Soap

100% NATURAL

Product Code :
Item Code : ( )
Matrix :
Approx. Size :
Product Date :
Start-Date :
Start-Date : (R)
Recommended Storage :

Comment :
test has shortened timescale for analysis and/or returning results.

Milk

100% NATURAL

Product Code :
Item Code : ( )
Matrix :
Approx. Size :
Product Date :
Start-Date : pH
Recommended Storage :

Comment :
test has shortened timescale for analysis and/or returning results.

Sun Flower Oil

100% NATURAL

Homogeneity and stability .

- **All testing** materials are tested and guaranteed for homogeneity and stability in the result assessment for participants stage as part of the PTS Internal Quality Control (IQC) process.

- Samples shall be analysed using your own standard operating procedures.

- Samples should be treated in the same manner as routine samples.

- The specimens should be tested with the laboratory's regular Sample workload by staff that routinely performs the testing in the laboratory.

- **Do not** send PT samples to another laboratory for testing.

7.0	The number and type of expected participants in the proficiency testing scheme:

A minimum of 10 laboratories are expected to participate. and every participant can submit multiple results in order to compare results between different analysts, methods or instruments, maximum of 3 results can be nominated results, nominated results are included in the statistical analysis of the data set, nominated results must be obtained using different methods, again to minimize the effect of bias. (note : every result acting   as individual participant code in current round).

More than 10 and up to 20 participants will be entertained if the participation forms are received before last date of registration.

In case of non-receipt of sufficient participants following actions need to be initiated:

1. If at least 8 participants have been registered before last date of registration, then execute the PT Scheme.

2. If only 5 participants have been registered before last date of registration, extend the date of registration at least 15 to 30 days to get the sufficient number of participants,

3. If less than 5 participants have been registered before last date of registration, then postpone the PT scheme and inform to the registered participants and pay them back their registration amount

REPORTING PROFICIENCY TESTING SCHEME RESULTS:

1. If a participating laboratory has more than one instrument, the results must be submitted on separate result sheets (which your laboratory has made copies from the master result sheet).

2. Review analyte/parameter and instrument information (must submitted Evidence and raw data)

3. Report in Requested units (Report results in the units as provided in the results submission form) .

4. Report in Requested Decimal Places (Do not exceed the number of decimal places indicated).

5. Out of range results (Quantitative Schemes) .

6. Miscalculations, transpositions and other Gross Errors Test results that are found to be inappropriate for evaluation due to miscalculations, transpositions or other gross errors will not be included in the evaluation. Incorrect results will be evaluated as such.

7. MANUAL SUBMISSION OF PTS RESULTS Return the survey result form to the PTS provider E-mail. Result forms must be completed in full,

8. All test results must be submitted until midnight of the due date. Results submitted after the due date will not be evaluated.

9. Amended results are accepted until midnight of the due date.

Determining the uncertainty of the assigned value

7.7.7   When the assigned value is derived as a robust average calculated using procedures in C.2, C.3, the standard uncertainty of the assigned value x_{pt} may be estimated as:

$$u(x_{pt}) = 1,25 \times \frac{s^*}{\sqrt{p}} \tag{6}$$

where s^* is the robust standard deviation of the results. (Here a "result" for a participant is the average of all their measurements on the proficiency test item.)

NOTE 1   In this model, where the assigned value and robust standard deviation are determined from participant results, the uncertainty of the assigned value can be assumed to include the effects of uncertainty due to inhomogeneity, transport, and instability.

NOTE 2   The factor 1,25 is based on the standard deviation of the median, or the efficiency of the median as an estimate of the mean, in a large set of results drawn from a normal distribution. It is appreciated that the efficiency of more sophisticated robust methods can be much greater than that of the median, justifying a correction factor smaller than 1,25. However, this factor has been recommended because proficiency testing results typically are not strictly normally distributed, and contain unknown proportions of results from different distributions ('contaminated results'). The factor of 1,25 is considered to be a conservative (high) estimate, to account for possible contamination. A smaller factor, or a different equation, can be justified depending on experience and the robust procedure used.

NOTE   ISO 13528 recommends robust statistical methods for the determination of the consensus mean and standard deviation, without the need for outlier removal, but it is important to ensure as far as possible that results identifiable as gross errors are not included in statistical analysis, whether robust procedures are used or not.

D.1.2 Procedures for identifying outliers

Although robust statistics are strongly recommended for outlier-contaminated populations, they are not often recommended for very small data sets (see below for exceptions). Outlier testing, however, is possible for very small data sets. Outlier rejection followed by, for example, calculation of the mean or standard deviation may therefore be preferable in the case of very small proficiency testing schemes or groups.

Different outlier tests are applicable to different data set sizes. ISO 5725-2 provides tables for Grubbs' test for a single outlier and for two simultaneous outliers in the same direction. Grubbs and other tests require the number of possible outliers to be specified in advance and can fail when there are multiple outliers, making them most useful for $p>10$ (depending on the likely proportion of outliers).

NOTE 1   Care should be taken when estimating dispersion after outlier rejection as dispersion estimates will be biased low. The bias is not usually serious if rejection is carried out only at the 99 % level of confidence or above.

NOTE 2   Most univariate robust estimators for location and dispersion perform acceptably for $p \geq 12$.

Just saying *thanks*