## ACAS Proficiency Testing Program Introduction

## Determination Tear Force of Fabric

## 1. Objective

This program is designed to help participating labs to demonstrate their competency on the tear force of fabric testing, to create opportunities for laboratories to improve.

## 2. Organization and Responsibilities

This program was organized by ACAS, Analysis Capability Assessment System (ACAS) of Chinese Academy of Inspection and Quarantine (CAIQ), and coordinated by Korea Testing \& Research Institute (KTR) in Korea. ACAS and KTR both are proficiency testing providers accredited by China National Accreditation Service for Conformity Assessment (CNAS) and Korea Laboratory Accreditation Scheme (KOLAS) on the basis of ISO/IEC 17043 respectively.

During this proficiency testing program, ACAS will be responsible for developing this program, inviting participants, preparing, packaging and dispatching samples, handling participants; queries, circulating the interim report, final report and developing certificates to participants and acting as a contact point. KTR will be responsible for inviting participants in Korea, distributing samples, circulating and confirming the interim report and final report to participants and acting as a contact point in Korea.

## 3. Points of contacts

The contact details are given below:
Coordinator of ACAS/ PTP:
Name: LIU Hanxia
Add.: Rm. 8004, No. 11 Ronghua South Road, Yizhuang Economic and Technological Development Zone, Beijing, China
Post Code: 100176
E-mail: liuhanxia_cn@163.com
Tel: (+86) 1053897821
Fax: (+86) 1053897823

Coordinator of KTR/ PTP:
Name: M s. LEE, Saebomi
Add.: 98, Gyoyukwon-ro, Gwacheon-si, Gyeonggi-do, Republic of Korea
E-mail: saebomi@ktr.or.kr
Tel: (+82) 2-2164-0158

## 4. Selection of Participants

Labs carrying out tear force of fabric testing are welcome to participate in this PT program.

Youire encouraged to register and apply items on our official website: Find the address of http://www.acas.com.cn/verify/index.php/user/login, click the English version, register your own user name and password and complete your lab information; Find and click PROJECT REGISTRATION, then research key word with ¡PT310; , click ¡Registration to select testing items you will participate in.

If you have any difficulty on registration, you could complete the attached Nomination Form and send it to us. We will register for you and send your account information for your data submission.

## 5. Description of PTIs

The samples are trouser shaped test specimens with a label on it, the details:
Sample A: 80cm (across warp)* 80 cm (warp direction)
Sample B: 80 cm (across warp)* 80 cm (warp direction)
The warp direction is marked as the arrow on the label shows, and each sample is enough for test five times.

The samples are packaged in clean self-closing plastic bags.
Each participant will receive two samples. Both samples should be tested on items you participate in.

## 6. Properties Measured for Comparison and Requirement

Two testing items: tear force in warp direction, tear force in across warp.
Participants are expected to use the test method of their choice, which should be consistent with your routine testing. Testing procedure should follow the descriptions in the method choosed.

The name and the number of the method choosed should be reported. The
testing results should be reported with two decimal places and unit of $N$.

## 7. Documents Submitting and Guide

Sample confirmation and testing results should be submitted through website of ACAS following the guide below.

Sample confirmation should be confirmed once receive samples online and inform coordinator of KTR. Results of testing, methods and original data should be submitted on line by June 30, 2016.

Guide for documents submitting through website: Find the address of http://www.acas.com.cn/verify/index.php/user/login, click the English version, login with your user name and password; find and click M Y PROJECT, then click Sample Confirmation to fill in the blanks. When submitting the results of the testing, follow the steps of above statement and click TESTING RESULTS SUBMIT to provide the data needed.

## 8. Homogeneity \& Stability Study

12 samples will be selected randomly from the prepared bags of samples and analyzed in duplicate for determining homogeneity in accordance with the recommendation stipulated in ISO 13528. Three samples will be taken randomly and be analyzed in duplicate at temperatures below $30^{\circ} \mathrm{C}$ and elevated temperature (about $40^{\circ} \mathrm{C}$ ) for monitoring the stability between sample dispatch and after submission of results.

## 9. Assigned Value

The simple robust statistics will be applied to determine the assigned values. That's to say, the median of the participants will be assigned values.

## 10. Evaluation of the Performance

The participants; performance will be calculated by robust statistical method, which assessed using z-scores and calculated by the following formula:

$$
z_{i}=\frac{x_{i}-x_{p t}}{\sigma_{p t}}
$$

In the formula:
$x_{i}$ - participants; testing results;
$x_{p t}-$ assigned value;
$\sigma_{p t}$ - standard deviation of proficiency assessment.

## 11. Reporting to the Participants

After the results returning to ACAS, interim report will be prepared and circulated. W ith the approval of CNAS and KOLAS, final report will be distributed.

## 12. Confidentially

Participants in the reports will only be indicated by the lab codes.

## 13. Program Schedule

| Items | Period | Responsible |
| :--- | :--- | :--- |
| Invitation of participants | Jan. $2016^{*}$ M ay 2016 | ACAS and KTR |
| Preparation of samples | Apr. $2016^{*}$ M ay 2016 | ACAS |
| Dispatch of Samples | Jun. 2016 | ACAS and KTR |
| Statistical analysis of results | Jul. 2016 | ACAS |
| Interim report | Jul. 2016 | ACAS |
| Drafting final report | Aug. $2016{ }^{*}$ Sep. 2016 | ACAS |
| Final report confirming | Sep. 2016 | CNAS and KOLAS |
| Dispatch of final report and <br> certificates | Sep. 2016 | ACAS and KTR |

## 14. Reference

[1] ISO/IEC 17043:2010, Conformity assessment - General requirements for proficiency testing.
[2] APLAC PT002: 2003, Testing Interlaboratory Comparisons.
[3] ISO 13528:2005, Statistical methods for use in proficiency testing by interlaboratory comparisons.

ACAS-PT310 Proficiency Testing Programme
"Determination Tear Force of Fabric"
Nomination Form

## Basic information

Laboratory Name:
E-mail:
Physical Address:
Postal code:
Contact person:

Contact number:
Fax:

Carrying out testing for food exported to China?$\square$ No

Intend to attend:Tear force in warp directionTear force in across warp

Qualification and Accreditation
Accredited for test: $\square$ Tear force in warp direction
$\square$ Tear force in across warp
$\square$ None
Laboratory qualification authentication:
Legal entity name:
Country/Economy:
Company Name:
Company website:
Accreditation body:

Accreditation certificate number:
The period of validity of the Accreditation certificate:

Please complete the details of your nominated laboratories, email to acas_international@126.com and cc to saebomi@ktr.or.kr and liuhanxia_cn@163.com no later than 31th May, 2016.

You're encouraged to register and apply items on our official website: http://www.acas.com.cn/verify/index.php/user/login ; or you could complete above information and we will register for you.

