



# Brochure of Chemical, Thermal and Mechanical Properties of Plastic/ Rubber Proficiency Testing Program 2017

~In accordance with the general requirements of ISO/IEC 17025~

~The best way to enhance testing capability of laboratory~

## 1. Origin :

Participation in proficiency tests (PT) mainly to assess the capability of testing laboratories. Through the designation test methods, test conditions and homogeneous samples of PT provider, laboratories submit the test results, PT provider will issue a final report, after calculate of performance statistics, and evaluate of performance. This report can be an evidence for external quality assurance, also to show the level of laboratory testing capability. Plastics Industry Development Center (PIDC) has many years of experience in holding proficiency testing activities. Helping laboratory staff to know whether the test equipment is under normal condition or not. Does the technical competence of the laboratory operator meet the requirements? Regularly participate in the proficiency test activities maintaining the stability of laboratory test results, and can enhance laboratory internal quality assurance and quality control, and ensure the reliability of test results. Whether it is the World Trade Organization (WTO), the Asia Pacific Laboratory Accreditation Cooperation (APLAC) or the Asia-Pacific Economic Cooperation (APEC) are committed to global trade liberalization, in this trend, testing results and calibration results traceability and comparability, is getting more and more attention.

In the past, different laboratories test the same samples got the very different test results. Because there is no reliable system can be judged, thus often caused disputes inter-laboratory. Therefore, in order to meet the requirements of certification and to maintain the testing levels of accredited laboratories, PIDC began to provide the plastic and rubber proficiency test from 2002, Also PIDC provided information to Taiwan Accreditation Foundation (TAF) to establish the relevant requirements, to promote inter-laboratory comparison and enhance the inspection technology and quality assurance capabilities.

In recent years, the international special against plasticizers added to the plastic matrix or metals content of the concern, PIDC continuing to hold the "Mechanical Test of Plastics Proficiency Testing ", we also hold the test of plasticizers and metals contents in plastic matrix this year. Not only invited the TAF accredited laboratory to participate, but also we welcome the willingness laboratories, to enhance the capacity of test skills together.

## 2. Benefit of results :

- 2.1 In order to meet the general requirements of ISO/IEC 17025.
- 2.2 To understand testing ability of your laboratory.
- 2.3 To ensure the accuracy of your test results.
- 2.4 To verify the technical capability of laboratory operator.
- 2.5 Provide evidence for the quality of laboratory testing.



2.6 To gain customer confidence in your test report and increase your customer trust.

2.7 To prevent customer disputes caused by abnormal test results.

2.8 To meet the technical requirements of laboratory accreditation.

2.9 Enhance the quality of laboratory testing services.

### 3. Timeline :

Session	Session 1 PIDC-2017PT01	Session 2 PIDC-2017PT02	Session 3 PIDC-2017PT03
3.1 Deadline for application information submission	2017/04/10	2017/07/03	2017/09/25
3.2 Samples and instructions dispatch date	2017/04/17	2017/07/10	2017/10/02
3.3 Deadline for test results submission	2017/05/31	2017/08/24	2017/11/16
3.4 Report publish	2017/07/05	2017/09/28	2017/12/21

### 4. Programs :

Program	Code	Items	Fees (TWD, include shipping)	Standards & Methods	Sample Qty/size	Sample dispatch date
PIDC-2017P T01 Chemical Property of Plastic Session 1	PT-PC-01	Plastic-Identification of Material	8,500	Laboratory In-house method* The main of testing equipment is FTIR	3 granules	2017/04/17
	PT-PC-02	Plastic-Metals contents (Pb, Cd, Cr, Hg)	14,500	Laboratory In-house method* Reference method : Digestion method · IEC 62321-5	3 grams	2017/04/17
	PT-PC-03	Plastic-Plasticizers contents (DMP, DEP, DBP, BBP, DEHP, DNOP, DINP, DIDP)	14,500	Laboratory In-house method* Reference method : Dissolution method	3 grams	2017/04/17
PIDC-2017P T02 Thermal Property of Plastic Session 2	PT-PH-01	Plastic-Differential scanning calorimetry	8,500	ASTM D3418	3 granules	2017/07/10
	PT-PH-02	Plastic-Thermogravimetry of polymers	8,500	ASTM E1131	3 granules	2017/07/10
	PT-PH-03	Plastic-Determination of the melt mass-flow rate (MFR)	8,500	ASTM D1238	250 grams	2017/07/10
PIDC-2017P T02 Mechanical Property of Rubber Session 2	PT-RP-01	Rubber-Determination of tensile stress strain Properties	8,500	ASTM D412	7 pieces	2017/07/10
	PT-RP-02	Rubber-Determination of tear strength	8,500	ASTM D624	7 pieces	2017/07/10
	PT-RP-03	Rubber-Determination of indentation hardness	8,500	ASTM D2240	4 pieces	2017/07/10
PIDC-2017P T03 Mechanical Property of Plastic Session 3	PT-PP-01	Plastic-Determination of tensile properties	9,500	ASTM D638 (Type I)	7 pieces	2017/10/02
	PT-PP-02	Plastic-Determination of flexural properties	9,500	ASTM D790	7 pieces	2017/10/02
	PT-PP-03	Plastic-Determination of IZOD impact strength	9,500	ASTM D256	7 pieces	2017/10/02
	PT-PP-04	Plastic- Determination of density	8,500	ASTM D792	4 pieces	2017/10/02



	PT-PP-05	Plastic-Determination of indentation hardness by means of a durometer	8,500	ASTM D2240	4 pieces	2017/10/02
PIDC-2017P T03 Thermal Property of Plastic Session 3	PT-PH-04	Plastic-Determination of temperature of deflection under load	8,500	ASTM D648	4 pieces	2017/10/02
	PT-PH-05	Plastic-Determination of Vicat softening temperature	8,500	ASTM D1525	7 pieces	2017/10/02

## 5. Participants :

- 5.1 Accredited laboratories or laboratories preparing for ISO 17025 accreditation.
- 5.2 Laboratories with the testing capability and interested in proficiency testing programs.
- 5.3 Seek to improve testing quality of your laboratory.
- 5.4 For supervision and quality control of products, center plant requires vendors to participate.
- 5.5 Laboratory was in dispute with your customer due to the inconsistency of the test results.

## 6. Participating in a PIDC program :

- 6.1 Please download and fill in "Application Form of Chemical, Thermal and Mechanical Properties Testing of Plastic/ Rubber Proficiency Testing Program 2017". After payment, please send back the application form and the payment information to PIDC by e-mail, fax or mail, before the deadline for application information submission.
- 6.2 Participation application will be confirmed upon receiving the payment information and the application form.
- 6.3 Payment : **Pay by foreign remittance or credit card** (CTBC Bank Co., Ltd. Taichung Branch, account number : 026-540-017-074, account name : Plastics industry development center) .
- 6.4 If the participant chooses to pay by credit card, PIDC will send you an e-mail for the payment webpage link after receiving the application form, and the participant will pay for the credit card online.

## 7. Organizer and Contact Information :

Verification technology Dept., Plastics Industry Development Center

Miss Yun-Shiuan Yeh

Tel : +886-4-23595900 Ext 642, Fax : +886-4-23595885, E-mail : [ptp@pidc.org.tw](mailto:ptp@pidc.org.tw)

Address : No.139, 38th Rd., Taichung Industrial Park, Taichung City 40768, Taiwan, R.O.C.

## 8. Report :

The identity of each participant in the proficiency testing is assigned a code number. The participants must return the test results datasheet. PIDC will issued a summary report to participants.

## 9. Confidentiality :

All information supplied by a participant to PIDC will be treated as confidential. It is all persons' involved in the operation of the proficiency testing scheme, responsibility to protect participant confidentiality. When a regulatory authority requires proficiency testing results to be directly provided to the authority by PIDC. PIDC will notify the participant in writing. Please do not apply if rejects this request.





## 10. Precautions :

- 10.1 Participation application will be confirmed upon receiving participation fee. After the application is confirmed, the application for refund will not be accepted.
- 10.2 After application deadline, each program will be canceled and participation fee will be refunded, if the participants less than 5.

