

ENSURING QUALITY: REFERENCE MATERIAL PRODUCERS(RMP) ACCREDITATION

Ensuring global confidence through ISO
17034 accreditation..



APAC

ASIA PACIFIC
ACCREDITATION COOPERATION

Competence | Acceptance | Equivalence



Reliable testing and measurement depend on trusted reference materials. Accreditation of Reference Material Producers (RMPs) ensures laboratories, regulators, and industry can have confidence in the quality and consistency of these materials. This underpins public safety, innovation, and international trade.

ISO 17034:2016 “General requirements for the competence of reference material producers” is the standard for the conformity assessment of reference material producers (RMP) and is used widely in the Asia Pacific region.





Below standards further help to reinforce the technical robustness and traceability expected under ISO 17034-

- **ISO 33401 "Reference materials"** — Contents of certificates, labels and accompanying documentation" on documentation,
- **ISO 33403 "Reference materials"** — Requirements and recommendations for use"
- **ISO 33405 "Reference materials"** — Approaches for characterization and assessment of homogeneity and stability"

Accreditation bodies under the APAC MRA grant accreditation as per ISO 17034, enabling accredited laboratories to use accredited RMPs in a region or globally.



What is Reference Material and its usage?



Reference Materials is a material which is sufficiently homogeneous and stable with respect to one or more specified properties which has been established to be fit for an intended use in a measurement process.



Reference materials are used in all stages of a measurement process including for comparison of methods, quality control and for use in interlaboratory comparisons which includes proficiency testing of Laboratories and Inspection Bodies.



What is Certified Reference Material and its usage?



Certified Reference Material is a reference material characterized by a metrological valid procedure for one or more specified properties, accompanied by a Reference Material certificate that provides the value of the specified property, its associated uncertainty, and a statement of metrological traceability.



In addition to the uses of Reference Materials, Certified Reference Materials also support method validation, achieving metrological traceability and calibration of measurement systems.



What is the difference between RM and CRM?

Certified Reference Materials (CRM) are a subset of Reference Material (RM) that are accompanied by a Reference Material Certificate, which specifies the certified value, its associated uncertainty, and the metrological traceability whereas

The Reference Material are accompanied by Product information sheet.

Why are RMs and CRMs important?

Certified Reference Materials (CRM) and Reference Materials(RMs) are widely used by conformity assessment bodies (CABs) in all stages of the measurement process, including:

- *Establishment metrological traceability of a measurement result (CRM only)*
- *Validation/ Verification of a test method*
- *Calibration of equipment*
- *Quality controls*

In other words, Certified Reference Materials (CRM) and Reference Materials (RMs) are involved in the performance of testing, calibration, and measurements in relation to homogeneity, stability, and characterization assessments.

CRMs are particularly valuable when high measurement confidence, traceability, or method validation is required.

Practical approaches in using RMs and CRMs

CABs may find it sufficient and economical to rely on RMs for routine quality control checks as the specified properties and measurement uncertainties may not be as critical for the quality control activity.

CRMs are recommended, when available, for achieving measurement traceability, fulfilling the rigour of the validation of a test method, and for appropriate calibration of some measurement equipment.



What are the advantages of Accreditation of Reference Material Producers (RMP)?



Formal recognition of Competence of the RMP through the demonstration of technical activities such as homogeneity, stability, and characterization testing



Strengthens the foundation of accredited CABs



The results can be trusted at par with international CABs.



Provides efficiencies to CABs because it saves the task of verifying the RMs as critical consumables.



Assures confidence to consumers/users



Global acceptance of the RM



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HOW TO IDENTIFY AN ACCREDITED REFERENCE MATERIAL PRODUCERS (RMP)?

Consumers/Users can only be assured of Certified Reference Material and Reference Material that include a RM certificate/product information sheet which are accompanied by the Accreditation Body's symbol as these demonstrate that the producer has achieved and maintained ISO 17034 Accreditation from an APAC signatory.

Full members of APAC have Mutual Recognition Arrangement (MRA) for Accreditation of Reference Material Producers (RMP) in accordance with ISO 17034.

ABOUT APAC

The Asia Pacific Accreditation Cooperation (APAC) is the regional association of accreditation bodies in Asia Pacific with the primary role to manage and expand a mutual recognition arrangement (MRA) among accreditation bodies.

The MRA facilitates the acceptance of conformity assessment results (eg. test reports, inspection reports, management system certificates) across the region and with other regions around the world thereby facilitating trade. Mutual recognition is granted to an accreditation body by APAC after undergoing successful peer evaluation as per requirements of ISO/IEC 17011. APAC has partnerships with other international bodies (e.g. IAF and ILAC), regional bodies and donor agencies.

For more information Please [click here](#).

