



Australian Government

**Assessment Requirements for
PMBTECH401E Predict polymer
properties and characteristics**

Release: 1

Assessment Requirements for PMBTECH401E Predict polymer properties and characteristics

Modification History

Release 1. Unit code changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBTECH401 Predict polymer properties and characteristics.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- predict polymer properties and characteristics to support the improvement of at least one product or process.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- function of equipment and stages of manufacturing process in at least one method or field of polymer manufacturing
- typical applications of polymer materials, and their properties
- the relationship between polymer types or characteristics and optimal job specifications
- polymer morphology using phase diagrams
- properties of polymers in relation to their morphology
- physical failure in polymers
- polymer materials test methods and property data
- changes in properties and variations in test data
- changes in physical properties due to compounding, processing or environmental conditions
- variables that may impact test results, and what may be inferred from test result variances.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet – -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>