



Australian Government

**Assessment Requirements for MSTTX4004
Select dyes and develop dye specification
and recipe for production**

Release: 1

Assessment Requirements for MSTTX4004 Select dyes and develop dye specification and recipe for production

Modification History

Release 1. Supersedes and is equivalent to LMTTX4004A Select dyes and develop dye specification and recipe for production

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include:

- reading and following work instructions, standard operating procedures (SOPs), safe work practices
- applying relevant standards
- identifying textile characteristics
- establishing and confirming criteria for tests
- setting up and calibrating test equipment
- developing, planning and conducting preliminary trial testing
- conducting tests in limited production run against specified quality standards
- collating, analysing and interpreting tests
- developing and confirming final dye formula and specifications on at least two (2) occasions
- testing samples from bulk production run using appropriate techniques
- analysing results and reviewing, modifying and re-testing dye, as required
- developing, checking and filing dye specification and recipe in accordance with workplace procedures and industry and quality standards
- preparing reports and documentation
- monitoring dye specification and recipe to ensure continuity and repeatability of colour and test results
- complying with environmental requirements and workplace procedures at all stages of the process.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- relevant Australian Standards
- fibres, yarns and end products and their properties
- dye stuffs and classes
- chemistry of dyes and relevance to processing and fastness properties
- dyeing processes and dyeing machinery

- relation between dye machinery and selection of dye stuffs and classes
- tests applicable to the dyeing of textiles
- international testing standards
- application of dyes in laboratory and production process
- work health and safety (WHS) and environmental aspects of relevant workplace activities, including handling of chemicals and dangerous substances
- quality criteria
- quality practices
- workplace procedures
- recording and reporting practices.

Assessment Conditions

- Assessors must:
 - satisfy the assessor competency requirements that are in place at the time of the assessment, as set by the VET regulator
 - have vocational competency in selecting dyes and developing dye specifications and recipe, at least to the level being assessed, with relevant industry knowledge and experience.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>