



**Australian Government**

# **MSTTX3007 Prepare dyes for textile production**

**Release: 1**

# MSTTX3007 Prepare dyes for textile production

## Modification History

Release 1. Supersedes and is equivalent to LMTTX3007B Prepare dyes for textile production

## Application

This unit of competency covers the skills and knowledge required to prepare dyes for use in textile production.

The unit of competency applies to selecting and preparing dyes for dyeing textiles. Judgement may be required in planning and selecting appropriate processes or procedures for self and others.

Work may include liaison with specialist technicians from within the workplace and from external suppliers.

Work may be conducted in small to large scale enterprises and may involve individual and team activities.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Pre-requisite Unit

Nil

## Competency Field

Textile production

## Unit Sector

Not applicable

## Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

### 1 Determine job requirements

- 1.1 Follow standard operating procedures (SOPs)
- 1.2 Comply with work health and safety (WHS) requirements at all times
- 1.3 Use appropriate personal protective equipment (PPE) in accordance with SOPs

- |   |                                                             |     |                                                                                                                                                                  |
|---|-------------------------------------------------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |                                                             | 1.4 | Identify job requirements from specifications, drawings, job sheets or work instructions                                                                         |
| 2 | <b>Prepare for dye preparation</b>                          | 2.1 | Confirm specifications and/or sample of textile material or product with originator or client                                                                    |
|   |                                                             | 2.2 | Clarify end use and performance standards expected of finished product with appropriate personnel                                                                |
|   |                                                             | 2.3 | Analyse sample to determine type and composition using appropriate techniques, as required                                                                       |
| 3 | <b>Perform preliminary selection and evaluation of dyes</b> | 3.1 | Select potential dyes, chemicals and auxiliaries according to specifications and/or previous product dyeing references                                           |
|   |                                                             | 3.2 | Identify expected textile production or reproduction processes based on preliminary dye selection, and advise appropriate personnel                              |
|   |                                                             | 3.3 | Determine preliminary dye selection for the sample of textile                                                                                                    |
|   |                                                             | 3.4 | Trial dye selections and specification or recipe using laboratory-based production facilities, and evaluate results against requirements of originator or client |
|   |                                                             | 3.5 | Review dye selection or recipe for colour matching and re-test, as required                                                                                      |
|   |                                                             | 3.6 | Seek approval of preliminary dye specification by originator or client before implementing limited production run                                                |
| 4 | <b>Test dyes and finalise specification or recipe</b>       | 4.1 | Select appropriate sampling and testing techniques to evaluate product during limited production run                                                             |
|   |                                                             | 4.2 | Implement tests according to quality standards and workplace procedures                                                                                          |
|   |                                                             | 4.3 | Analyse results and review and retest preliminary dye selection/recipe, as required, to ensure colour matching and specifications are achieved                   |

- 4.4 Check dye selection against original client specifications and requirements and workplace production requirements
- 4.5 Seek approval of colour specification by originator or client before implementing bulk production run and record process
- 4.6 Apply environmental requirements and procedures concerned with waste, pollution, storage and recycling of materials at all stages of the process

## Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

**Workplace procedures include one or more of the following:**

- requirements prescribed by legislation, awards, agreements and conditions of employment
- SOPs
- work instructions
- PPE
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling
- WHS practices

**Australian Standards include:**

- the relevant industry or Australian Standards that are current at the time this unit is being undertaken

**Textile materials or products include one or more of the following:**

- fibres, including polyester, cotton, wool, viscose and rayon
- yarns, including ring spun, open-ended spun, air jet spun and friction spun
- fabrics
- finished products, including socks, sweaters, towels, sheets, blankets, carpets, rope and twine, mops and industrial textiles

**Tests include one or more of the following:**

- those associated with product or process development
- colour fastness
- shrinkage

## Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTTX3007B Prepare dyes for textile production

## Links

Companion Volume implementation guides are found in VETNet -

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