

Title	Measure, dispense and mix dyestuffs and chemicals		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of safe chemical handling and emergency procedures; prepare to measure dyestuffs; measure and dispense dyestuffs; mix chemicals and dyes for use; and complete documentation.
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Classification	Textiles Manufacture > Textile Dyeing and Finishing
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to the: Health and Safety at Work Act 2015.
- 2 Definitions

Product specifications refer to the document which accompanies each manufacturing order. This specifies all of the parameters for production of the yarn batch. This may include the fibre specification, the shade, dye bath parameters, machinery to be used and finishing procedures.

Workplace procedures refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, and procedures to comply with legislative and local body requirements.
- 3 Assessment information

All activities and evidence must be in accordance with workplace procedures.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of safe chemical handling and emergency procedures.

Performance criteria

- 1.1 Workplace first aid procedures for chemical accidents are demonstrated.

- 1.2 Safety equipment is located and operation of equipment is demonstrated.
- Range may include but is not limited to – gloves, face shield or mask or glasses, overalls, aprons, shoes.
- 1.3 Chemicals used in the workplace are described in terms of the dangers in handling and dispensing and Health and Safety at Work Act 2015 requirements.
- 1.4 Workplace accident reporting procedures are described.

Outcome 2

Prepare to measure dyestuffs.

Performance criteria

- 2.1 Availability of dyestuffs and chemicals is confirmed in accordance with product specifications.
- 2.2 Dyestuffs and chemical quantities are calculated from the recipe.
- 2.3 Measurement equipment is prepared for use.

Outcome 3

Measure and dispense dyestuffs.

Performance criteria

- 3.1 Dyestuffs and chemicals are handled.
- 3.2 Measurement is carried out for the equipment used.
- Range by volume, by weight.
- 3.3 Measured quantities of dyestuff and chemicals are placed in identified and empty containers.
- 3.4 Work areas are left clean and clear of chemical and dye spillages.

Outcome 4

Mix chemicals and dyes for use.

Performance criteria

- 4.1 Chemicals and dyes are identified in accordance with product specifications.

4.2 Solid dyes and chemicals are dissolved or dispersed in accordance with product specifications.

Range safety procedures followed, containers and equipment clean, completely dissolved or dispersed without lumps or sediment.

4.3 Liquid chemicals are prepared in accordance with product specifications.

Range safety procedures followed, containers and equipment clean, chemical addition sequences followed when mixing or diluting.

4.4 Work areas are left clean and clear of chemical and dye spillages.

Outcome 5

Complete documentation.

Performance criteria

5.1 Documentation is completed.

Range usage calculations, stock records.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 May 2016	31 December 2025
Review	2	24 March 2022	N/A

Consent and Moderation Requirements (CMR) reference	0030
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.