



Australian Government

Department of Education, Employment and Workplace Relations

FDFLAB3004A Check and maintain readiness of wine testing equipment

Release 3

FDFLAB3004A Check and maintain readiness of wine testing equipment

Modification History

September 2012: clarified pre-requisite information.

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to perform set-up and pre-use checks on wine testing equipment and assist with maintenance.
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Application of the Unit

Application of the unit	<p>This unit of competency has been developed for the laboratory stream of the wine sector. It applies to equipment used in laboratories, cellar and field testing for the wine industry. Maintenance tasks include identification of faults, minor repairs and maintenance and notification of requirements for major repairs, according to enterprise procedures.</p> <p>All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements.</p>
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFLAB2006A	Record laboratory data, and
	FDFLAB2001A	Perform basic analytical tests*, or <i>FDFLAB2011A Use basic laboratory equipment</i>
	FDFLAB2002A	Perform basic microbiological tests*, or <i>FDFLAB2012 Maintain aseptic environment</i> <i>FDFLAB2011A Use basic laboratory equipment</i>

	FDFLAB2009A	Perform packaging quality control procedures* <i>FDFLAB2011A Use basic laboratory equipment</i>
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Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Perform pre-use checks of wine testing equipment	<ul style="list-style-type: none">1.1 Wine testing equipment pre-use checks are performed in accordance with enterprise procedures1.2 Safety checks are performed in accordance with relevant enterprise and instrumental procedures1.3 Faulty or unsafe components and equipment are identified and reported to appropriate personnel1.4 Instrument log books are completed to enterprise requirements
2. Perform set-up checks	<ul style="list-style-type: none">2.1 Equipment is started up according to operating procedures2.2 Equipment performance is checked for accuracy according to operating procedures2.3 Results of pre-start checks are recorded according to operating procedures2.4 Out-of-specification equipment is quarantined
3. Assist with equipment maintenance	<ul style="list-style-type: none">3.1 All equipment work areas are cleaned during and after equipment use3.2 Work is conducted in accordance with workplace environmental guidelines3.3 Basic maintenance is performed in accordance with enterprise procedures3.4 Equipment is cleaned and stored according to enterprise and/or manufacturer specifications or procedures3.5 Damaged or worn equipment is identified and replaced, repaired or disposed of as appropriate
4. Maintain records	<ul style="list-style-type: none">4.1 Equipment logs are maintained in accordance with enterprise procedures4.2 Information on unsafe or faulty equipment is recorded and reported as per enterprise procedures

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access and interpret technical information
- select, fit and use appropriate personal protective clothing and/or equipment
- confirm availability of necessary materials, equipment and services
- confirm equipment status and condition. This may include:
 - confirm that test equipment is operating accurately
 - recognise and rejecting contaminated or faulty glassware and equipment
 - perform safety checks
 - replace consumables
 - perform instrument setting
- monitor test equipment to identify out-of-standard results or non-compliance
- take corrective action in response to out-of-standard results, anomalies or non-compliance
- report and/or record corrective action according to workplace procedures
- sort, collect, treat, recycle or dispose of waste
- shut down equipment
- maintain work area to meet housekeeping standards
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce.

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- operational principles and methods for equipment use
- basic sources of error in equipment operation and their control
- role and importance of correct equipment checking and testing
- basic equipment maintenance procedures
- correct occupational health and safety (OHS) procedures
- enterprise communication and reporting procedures
- function of key components of the instrument
- effects of environmental conditions and controls on testing
- procedures and responsibility for reporting problems
- recording requirements and procedures.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of ability to:</p> <ul style="list-style-type: none"> • perform set-up pre-use checks and shutdown procedures • check basic equipment using standard procedures • obtain readings of the required accuracy and precision • recognise non-standard behaviour of instruments • assist with maintaining equipment in working order • follow all relevant OHS requirements • follow enterprise recording and reporting procedures.
Context of and specific resources for assessment	<p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> • personal protective clothing and equipment as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • standard laboratory equipped with appropriate spectrometers • standard laboratory equipped with appropriate equipment and reference manuals • SOPs, calibration standards and procedures, maintenance procedures. • documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over

EVIDENCE GUIDE

	a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.
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Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures

Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements

Workplace information

Workplace information may include:

- Standard Operating Procedures (SOPs)
- specifications
- production schedules
- instructions
- work notes
- Material Safety Data Sheets (MSDS)
- manufacturer instructions
- verbal direction from laboratory manager, supervisor or senior operator

Equipment

Equipment may vary and should include that listed in test procedure or directions for conducting analyses. Typical equipment may include:

- balances, pipettes, burettes and volumetric glassware
- optical microscopes
- melting point apparatus, viscometers and hardness testing equipment
- conductivity meters and pH meters
- noise meters and blasting meters
- disintegration apparatus, thermometers, incubators and water baths
- colorimeters/spectrometers and polarimeters

RANGE STATEMENT	
	<ul style="list-style-type: none">• compaction rammers and soil classification equipment• instrument chart recorders, penetrometers, force measuring equipment and tensiometers• mixing and separating equipment, such as centrifuges, riffles and splitters, and mixers• hydrometers (e.g. baumé, specific gravity and alcoholometers)• turbidity meters• refractometers• calipers
Equipment status	Confirming equipment status involves: <ul style="list-style-type: none">• checking that hygiene and sanitation standards, safety standards and pre-start requirements are met, and that equipment is operational• checking the operation of measuring instrumentation

Unit Sector(s)

Unit sector	Wine operations
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