



Australian Government

Department of Education, Employment and Workplace Relations

FDFSUG224A Perform standard tests on cane samples

Release: 1

FDFSUG224A Perform standard tests on cane samples

Modification History

New Unit based on *SUGPPST2A Perform standard tests*.

Unit Descriptor

This unit describes the outcomes required to analyse samples for cane payment and routine factory control. Tests are typically routine, repetitive procedures based on defined methods and require interpretation of results within clearly defined guidelines.

Application of the Unit

This unit has application in the sugar milling industry.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

There are no pre-requisite units for this competency standard.

Employability Skills Information

This unit contains employability skills.

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 Prepare for testing	<ul style="list-style-type: none">1.1 Testing requirements and methods are identified1.2 Testing equipment is confirmed as available and fit for use1.3 Test chemicals and reagents are prepared and labelled as required by test method1.4 Samples are prepared as required by test method1.5 Pre-test checks are conducted and recorded according to workplace recording requirements
2 Conduct test	<ul style="list-style-type: none">2.1 Conduct test in accordance with test method and test schedule2.2 Identify and report atypical test results2.3 Record and communicate test results as required2.4 Follow procedures to repeat or validate results2.5 Clean, care for and store equipment as required2.6 Dispose of waste materials according to workplace procedure
3 Record test data in laboratory information system	<ul style="list-style-type: none">3.1 Results are entered into laboratory information systems according to workplace procedure3.2 Correct data entry errors3.3 Store and retrieve data in the laboratory information system3.4 Produce standard reports from laboratory information system

Required Skills and Knowledge

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

Required skills include:

Ability to:

- access workplace information such as the test regime to identify test requirements and methods
- select, fit and use personal protective clothing and/or equipment
- confirm that necessary test equipment, chemicals and reagents are available and fit for purpose
- confirm or conduct routine equipment calibration according to workplace procedures, methods and legislative requirements
- handle chemicals safely including following correct handling and preparation procedures and use of appropriate protective clothing and equipment
- demonstrate test procedures according to test schedule and test method
- identify and report any out-of-specification results
- communicate test results to relevant personnel
- maintain and store chemicals, reagents and test equipment required
- sort, collect, treat, recycle or dispose of tested materials
- record information in the laboratory information system including the ability to retrieve, enter and edit data, generate standard reports and store information
- maintain work area to meet housekeeping standards

Required knowledge includes:

Knowledge of:

- purpose of the test procedure including a basic understanding of the principles of the test method and of equipment used
- awareness of legislative requirements relating to cane payment tests
- terminology relating to the types of tests and related methods used
- safe work procedures including hazards associated with specific test procedures requirements such as working with chemicals and test equipment
- specific test methods/procedures
- requirements to communicate out-of-specification results
- typical causes of out-of-specification results and procedure for repeating the analysis
- laboratory information system recording and reporting requirements that meet legislative record keeping requirements and workplace requirements.

Evidence Guide

<p>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.</p>	
<p>Overview of assessment</p>	<p>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.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Evidence of ability to:</p> <ul style="list-style-type: none"> • access test information • confirm test equipment, chemicals and reagents are available • demonstrate test procedures • identify and report any out-of-specification results • communicate test results to relevant personnel • sort, collect, treat, recycle or dispose of tested materials • record information in the laboratory information system.
<p>Context of and specific resources for assessment</p>	<p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> • Test equipment, chemicals and reagents and related equipment • Materials to be tested • Test methods and procedures • Personal protective clothing and equipment • Communication systems and equipment • Housekeeping standards and procedures • Sample labeling and recording systems, requirements and procedures • Laboratory recording and reporting system.
<p>Method of assessment</p>	<p>Other units of competency relevant to the work role should be assessed in conjunction with this unit.</p>
<p>Guidance information for assessment</p>	<p>To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.</p>

Range Statement

<p>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.</p>	
<p>Policies and procedures</p>	<p>Work is carried out in accordance with company policies and procedures, manufacturer's recommendations, legislative requirements, codes of practice and industrial awards and agreements.</p>
<p>Codes of practice</p>	<p>Codes of practice include the Sugar Milling Operations Industry Code of Practice.</p>
<p>Workplace information</p>	<p>Workplace information can include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • Specifications • test methods and • procedures.
<p>Equipment</p>	<p>Equipment is defined by test method and legislative requirements. Confirming equipment condition may include conducting calibration procedures. Calibration procedures are routine, documented procedures.</p>
<p>Standard tests</p>	<p>Tests are typically routine, repetitive procedures based on defined methods and requiring interpretation of results within clearly defined guidelines.</p> <p>The types of tests conducted depends on the test equipment and methods used and may include but are not limited to:</p> <ul style="list-style-type: none"> • bagasse analysis - pol by disintegrator method and moisture • sugar analysis - pol and moisture • juice analysis - clarified juice, first expressed juice and mixed juice - pH, turbidity, brix and pol • mud analysis - pol and moisture • molasses massecuite syrup - brix, pol, apparent purity • drain water analysis - sugar presence by an industry-recognised method.
<p>Teamwork</p>	<p>Work may require the ability to work within a team environment.</p>

Information systems	Information systems may be print or screen based.
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Unit Sector(s)

Sugar Milling