



Australian Government

Department of Education, Employment and Workplace Relations

PMBPREP206C Prepare materials to formulae

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor

This competency covers preparing materials to formulae for production or product finishing.

Application of the Unit

Application of this unit

This competency applies to operators who assemble materials to formulae for production or production finishing. The key factors are identifying handling requirements for materials, preparing for the combination of ingredients and collecting and assembling ingredients. This competency is typically performed by operators working either independently or as part of a work team.

It includes:

- checking job sheets for work to be done and identifying the priority in which jobs/product will be made/completed
- following approved hazard minimisation procedures for any hazards connected with materials and process, using work instructions, labels and materials safety data sheets, and in accordance with occupational health and safety legislative responsibilities
- collecting a range of materials and assembling them close to the start of the process and in the same sequence as the jobs are to be done checking materials to ensure no contamination
- combining materials to a formulae
- moving required materials into the right place by the right time.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisites

This unit has **no** prerequisites.

Employability Skills Information

Employability Skills

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT ELEMENT	PERFORMANCE CRITERIA Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.
1. Identify requirements to handle materials.	1.1 Read and interpret specifications for materials and identify materials. 1.2 Identify units of measurement and matching measuring equipment. 1.3 Know the tolerances of measuring equipment and relate them to the impact of over/under measurement of ingredients on production process and quality. 1.4 Follow procedures to identify and control hazards. 1.5 Read workplace procedures and use them to plan work sequence.
2. Prepare for assembly of ingredients.	2.1 Calibrate or zero equipment for measurement and/or identify appropriate measurement scales. 2.2 Set up and fit required personal protection equipment and engineering controls. 2.3 Assemble equipment for dealing with emergencies. 2.4 Check work area for cleanliness. 2.5 Identify sources of potential contamination and take steps to minimise/eliminate contamination risk.
3. Assemble ingredients.	3.1 Collect ingredients. 3.2 Weigh/measure ingredients according to procedure. 3.3 Follow appropriate workplace approved sequence for combination of materials. 3.4 Follow standard operating procedures and observe appropriate safety measures when conducting work. 3.5 Check for correctness of colour to standard. 3.6 Take action specified in procedures if materials/assembled ingredients do not appear to meet requirements. 3.7 Complete workplace records. 3.8 Store unused ingredients, and clean and store

ELEMENT	PERFORMANCE CRITERIA
ELEMENT	Performance Criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the Evidence Guide.
	equipment.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level required for this unit.

Application of knowledge of the materials, equipment and process sufficient to recognise out of specification products, process problems and materials faults.

Knowledge of organisation procedures and relevant regulatory requirements along with the ability to implement them within appropriate time constraints and work standards.

Competence includes the ability to:

- use measuring systems, scales and calculating devices
- observe storage and mixing requirements for materials to be mixed
- assess production workflow in relation to materials supply requirements
- recognise the focus of operation of work systems and equipment
- identify and correctly use equipment, processes and procedures
- plan own work, including predicting consequences and identifying improvements.

Language, literacy and numeracy requirements

This unit requires the ability to read and interpret typical product specifications, job sheets and material labels as provided to operators.

Writing is required to the level of completing workplace forms.

Numeracy is also required, e.g. to interpret specifications and measure accurately and perform simple addition and subtraction.

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

A holistic approach should be taken to the assessment.

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to:

- use measuring scales and equipment
- locate, use, interpret and apply relevant formulae and information
- maintain workplace records for materials used and mixes produced
- identify and safely handle products and materials applying safety precautions appropriate to the task, including safe storage of materials.

Consistent performance should be demonstrated. For example, look to see that:

- critical material properties and quantities are known
- potential situations requiring action result in implementing appropriate action.

Assessment method and context

Assessment will occur using industrial materials and formulae and will be undertaken in a work-like environment.

Competence in this unit may be assessed:

- on a processing plant, allowing for operation under all normal and a range of abnormal conditions
- in a situation allowing for the generation of evidence of the ability to respond to problems
 - by using a suitable simulation and/or a range of case studies/scenarios
 - through a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment. Assessors need to be aware of any cultural issues that may affect responses to questions.

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

Specific resources for assessment:

This section should be read in conjunction with the Range Statement for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method. Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.

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. Add any 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.

Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.

Context

This competency applies to operators working either independently or as part of a work team.

Procedures

All operations are performed in accordance with procedures.

Procedures means all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards.

Tools and equipment

This competency includes use of equipment and tools such as:

- measurement equipment
- knives and other bag opening equipment

- hoists/lifting equipment not requiring any special permits or licences basic hand tools required for opening of material packaging
- relevant personal protective equipment.

Hazards

Typical hazards include:

- spills dusts/vapours
- hazardous materials
- manual handling hazards
- knife hazards.

Problems

Respond to/rectify 'non-routine problems' means 'apply known solutions to a variety of predictable problems'. Typical process and product problems may include:

- inappropriate selection of raw materials
- contamination of raw materials
- incorrect formulae being selected
- combining inappropriate materials
- variations in materials
- contamination of materials.

Variables

Key variables to be monitored include

- mixtures and or proportions of materials to be used
- mixing techniques
- order of ingredient addition to the mixture
- atmospheric conditions
- cleanliness of the mixing area
- cleanliness of utensils.
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Unit Sector(s)

Not applicable.