

## Modification history

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 5.0

FBPOPR3X10	Operate and monitor an homogenising process
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a homogenising process.</p> <p>This unit applies to individuals who work in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a homogenising process and associated equipment.</p> <p>All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Operational (OPR)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet processing requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and equipment and ensure correct fit
2. Prepare homogenising process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Carry out pre-start checks according to workplace health and safety and operating procedures
3. Operate and monitor equipment	3.1 Start, operate and monitor the process to ensure optimal operations 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down homogenising equipment	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

<b>Foundation Skills</b>	
<i>This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Interpret workplace and standard operating procedures relevant to work task</li> <li>Interpret production requirements</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Record operating, routine maintenance and shutdown information on electronic, digital and/or paper-based formats</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Monitor and interpret production and process control indicators and data including temperature (°C), pressure, volume (mL, L)</li> <li>Monitor supply and flow of materials to and from the process</li> </ul>

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
FBPOPR3X10 Operate and monitor an homogenising process	FBPOPR2043 Operate an homogenising process	Unit code and title updated to better match complexity of task  Minor change to unit Application  Minor changes to Performance Criteria to clarify task  Foundation skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence to clarify requirements and Assessment Conditions	Equivalent unit

<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a>
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<b>TITLE</b>	<b>Assessment requirements for FBPOPR3X10 Operate and monitor an homogenising process</b>
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**Performance Evidence**

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.  
 There must be evidence that the individual has operated an homogenising process to homogenise at least one batch of food to specification, including:

- conducting pre-start checks, including:
  - inspecting equipment condition to identify any signs of wear
  - selecting appropriate settings and/or related parameters
  - cancelling isolation or lock-outs as required
  - confirming that equipment is clean and correctly configured for processing requirements
  - positioning sensors and controls correctly
  - ensuring any scheduled maintenance has been carried out
  - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm the homogenising process remains within specification, including:
  - temperature
  - pressure
  - throughput
- taking corrective action in response to out-of-specification results.

**Knowledge Evidence**

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of homogenising
- basic operating principles of equipment used in the operation of a homogenising process, including:
  - main equipment components
  - status and purpose of guards
  - equipment operating capacities and applications
  - the purpose and location of sensors and related feedback instrumentation
- effect of raw materials on homogenisation, including variables, including solids (brix), acidity, temperature, consistency and colour on process outcomes
- quality requirements to be achieved by the homogenisation process
- the flow of the homogenising process and the effect of product output on downstream processes
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults related to the homogenising process and related causes, including:
  - signs and symptoms of faulty equipment
  - early warning signs of potential problems
- techniques used to monitor the homogenising process, including inspecting, measuring and testing
- good manufacturing practices (GMP) relevant to work task
- inspection or test points (control points) in the process, and the related procedures and recording requirements
- common causes of variation in the operation of the homogenising process and corrective action required
- health and safety hazards and controls relevant to the operation of the homogenising process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the homogenising process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the homogenising process, including waste/rework collection and handling procedures related to the process

<b>Knowledge Evidence</b>	
<ul style="list-style-type: none"> <li>• basic operating principles of process control, including the relationship between control panels and systems and the physical equipment</li> <li>• cleaning and sanitation procedures required for homogenising equipment</li> <li>• procedures to record traceability of product.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• a workplace or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• personal protective clothing and equipment</li> <li>• homogenisation equipment and related services</li> <li>• product to be homogenised</li> <li>• cleaning materials and equipment</li> </ul> </li> <li>• specifications: <ul style="list-style-type: none"> <li>• work procedures, including advice on safe work practices, food safety, quality and environmental requirements</li> <li>• information on equipment capacity and operating parameters</li> <li>• production schedule/batch specifications, control points and processing parameters</li> <li>• recording requirements and procedures.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
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