## **Modification history**

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

FBPGPS2007	Operate an interesterification process
Application	This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an interesterification process to rearrange the chemical composition of oil molecules.
	This unit applies to individuals who apply basic operating principles to the operation and monitoring of an interesterification process in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.
	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.
	No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	Grocery and product supplies (GPS)

Elements	Performance Criteria	
Elements describe the	Performance criteria describe the performance needed to demonstrate	
essential outcomes.	achievement of the element.	
1. Prepare the	1.1 Ensure materials are available according to operating requirements	
interesterification	1.2 Identify and confirm cleaning and maintenance requirements have been	
equipment and process for	met	
operation	1.3 Enter processing or operating parameters to meet safety and production requirements	
	1.4 Check and adjust equipment performance to ensure optimum	
	performance	
	1.5 Conduct pre-start checks according to operator instructions	
2. Operate and monitor the	2.1 Start up and operate the interesterification process according to work	
interesterification process	health and safety and operating procedures	
	2.2 Monitor equipment to identify variation in operating conditions	
	2.3 Identify variation in equipment operation and report maintenance requirements	
	2.4 Confirm that specifications are met at each stage according to production specifications	
	2.5 Identify, rectify or report out-of-specification product and process	
	outcomes according to workplace procedures	
	2.6 Maintain the work area according to workplace guidelines	
	2.7 Enter workplace records in required format	
3. Shut down the	3.1 Identify the appropriate shutdown procedure	
interesterification process	3.2 Shut down the process according to operating procedures	
	3.3 Identify and report maintenance requirements	

Foundation S	ki	lls
--------------	----	-----

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.

performance in this unit of competency but are not explicit in the performance criteria.		
Skill	Description	
Reading	Read and interpret standard operating procedures for the interesterification process requirements	
Writing	Complete records according to workplace guidelines on paper-based and electronic media	
Numeracy	Monitor control points for equipment capacity and operating parameters	
Navigate the world of work	<ul> <li>Apply workplace procedures to own role and responsibilities</li> <li>Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements</li> <li>Maintain a clean and hazard-free work area</li> <li>Maintain hygiene standards</li> </ul>	
Interact with others	Report operational and safety information to relevant personnel using required communication method	
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2007 Operate an interesterification process	FDFGPS2007A Operate an interesterification process	Updated to meet Standards for Training Packages	Equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4

TITLE	Assessment requirements for FBPGPS2007 Operate an
	interesterification process

## **Performance Evidence**

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for the interesterification process
- started, operated, monitored and adjusted interesterification process equipment to remove impurities from crude oils to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- applied safe work practices and identified work health and safety hazards and controls
- completed workplace records in required format
- safely shut down equipment
- applied food safety procedures to work practices.

## 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 the interesterification process, including a basic understanding of the chemical structure of oil and the effect of interesterification on this structure
- basic operating principles of equipment, including:
  - main equipment components
  - · status and purpose of guards
  - · equipment operating capacities and applications
  - the purpose and location of sensors and related feedback instrumentation
- services required for an interesterification process and action to take if services are not available
- the flow of the interesterification process and the effect of outputs on downstream edible fats and oils processes
- quality characteristics to be achieved by the interesterification process
- quality requirements of materials and effect of variation on interesterification process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
  - signs and symptoms of faulty equipment
  - early warning signs of potential problems
- methods used to monitor the interesterification process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the interesterification process and the related procedures and recording requirements
- contamination/food safety risks associated with the interesterification process and related control measures
- · common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the interesterification process and workplace production requirements, including:
  - emergency and routine shutdowns
  - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the interesterification process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- sampling and testing associated with the interesterification process monitoring and control where relevant
- routine maintenance procedures for interesterification equipment
- · cleaning and sanitation procedures for interesterification equipment.

## **Assessment Conditions**

Assessment of skills must take place under the following conditions:

- physical conditions:
  - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - · personal protective clothing and equipment
  - interesterification process and related equipment and services
  - deodorised oil required for interesterification and related catalyst
  - sampling schedules, and test procedures and equipment
  - · cleaning procedures, materials and equipment
- specifications:
  - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
  - information on equipment capacity and operating parameters
  - · production schedule/batch instructions
  - · specifications, control points and processing parameters
  - · documentation and recording requirements and procedures
- relationships:
  - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links	Companion Volumes, including Implementation Guides, are available at VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-
	aad7-1159b570a5c4