



**Australian Government**

# **FBPOIL3003 Operate and monitor a deodorising process**

**Release: 1**

# FBPOIL3003 Operate and monitor a deodorising process

## Modification History

| Release   | Comments                                                                                       |
|-----------|------------------------------------------------------------------------------------------------|
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0. |

## Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a deodorising process to remove the disagreeable flavours and odours from the product.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of deodorising equipment and processes, 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 health and safety and food safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Pre-requisite Unit

Nil

## Unit Sector

Edible Oils (OIL)

## Elements and Performance Criteria

| 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 the deodorising equipment for operation | 1.1 Confirm oil stock and deodorising materials are available to meet product recipe requirements<br>1.2 Identify safety requirements and wear appropriate personal protective equipment, ensuring correct fit |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                  | <p>1.3 Confirm services are available, equipment is cleaned and citric acid solution is available</p> <p>1.4 Acknowledge and load operating parameters to meet production requirements</p> <p>1.5 Conduct pre-start checks according to operator instructions</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2. Operate and monitor equipment                 | <p>2.1 Start up and operate deodorising process according to safe operating procedures</p> <p>2.2 Ensure equipment and hoses are placed for optimal operations and to ensure safety</p> <p>2.3 Monitor equipment and services to ensure optimal operations</p> <p>2.4 Identify and rectify any irregularities in equipment operation, and report any maintenance requirements</p> <p>2.5 Check product and confirm specifications are met at each stage according to production specifications</p> <p>2.6 Identify, rectify or report out-of-specification product or process outcomes</p> <p>2.7 Maintain work area according to workplace guidelines</p> <p>2.8 Test deodorised oil samples to ensure product meets specifications</p> <p>2.9 Enter workplace records in required format</p> |
| 3. Shut down the deodorising process             | <p>3.1 Identify appropriate shutdown procedure</p> <p>3.2 Shut down process safely according to operating procedures</p> <p>3.3 Prepare equipment for cleaning in preparation for maintenance or next start-up</p> <p>3.4 Identify and report maintenance requirements according to workplace requirements</p> <p>3.5 Ensure waste is disposed of in line with environmental requirements</p>                                                                                                                                                                                                                                                                                                                                                                                                  |

## Foundation Skills

*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.*

| Skill    | Description                                                                                                                                                                                                                               |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Learning | <ul style="list-style-type: none"> <li>Solve routine problems according to workplace guidelines and using experience of past solutions</li> <li>Maintain hygiene standards</li> </ul>                                                     |
| Reading  | <ul style="list-style-type: none"> <li>Interpret standard operating procedures for the deodorising process</li> </ul>                                                                                                                     |
| Writing  | <ul style="list-style-type: none"> <li>Complete records according to workplace guidelines using digital and/or paper-based format</li> </ul>                                                                                              |
| Numeracy | <ul style="list-style-type: none"> <li>Read oil sample graphs and processing gauges</li> <li>Monitor control points for time and temperature, vacuum pressure and steam flow</li> <li>Interpret FFA tests (using % oleic acid)</li> </ul> |

## Unit Mapping Information

| Code and title current version                       | Code and title previous version          | Comments                                                                                                                                                                                                                                                         | Equivalence status |
|------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| FBPOIL3003 Operate and monitor a deodorising process | FBPGPS2003 Operate a deodorising process | Unit title and code updated to better match work task<br><br>Minor changes to Performance Criteria to clarify intent<br><br>Foundation Skills refined<br><br>Performance Evidence clarified<br><br>Minor changes to Knowledge Evidence and Assessment Conditions | Equivalent         |

## Links

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

# Assessment Requirements for FBPOIL3003 Operate and monitor a deodorising process

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## Performance Evidence

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

There must be evidence that the individual has operated and monitored a deodorising process to remove disagreeable flavours and odours from at least one batch of refined oil to meet specifications, including:

- applying safe work practices
- following food safety procedures
- making adjustments to the operating parameters to ensure quality outcomes
- taking corrective action in response to typical faults and inconsistencies.

## 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 deodorising process
- 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 a deodorising process, and action to take if services are not available
- good manufacturing practices (GMP) relevant to work task
- the flow of the deodorising process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the deodorising process
- quality requirements of materials, and effect of variation in oil quality on deodorising 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 deodorising process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the deodorising process (sensory, colour and free fatty acids) and the related procedures and recording requirements
- contamination/cross-contamination and food safety risks associated with the deodorising process, and related control measures
- common causes of variation, and corrective action required
- health and safety hazards and controls relevant to deodorising process
- requirements of different shutdowns as appropriate to the deodorising 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 deodorising process
- operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for deodorising equipment
- cleaning and tank clearing procedures for deodorising equipment
- product traceability procedures.

## Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
  - an oil processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - deodoriser, boiler and related services
  - oil for the deodorising process
  - personal protective equipment
  - sampling schedules, test procedures and equipment
  - cleaning 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 details, control points and processing parameters

- documentation and recording requirements.

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

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