



Australian Government

FBPOIL3012 Operate and monitor storage of virgin olive oil

Release: 1

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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, monitor and maintain the storage of virgin olive oil to maintain product integrity.

This unit applies to individuals who work in an olive oil processing environment. It typically applies to the production worker responsible for operating and monitoring of a holding and storage process and associated equipment.

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 for work in storage area	1.1 Inspect olive oil in receival tanks to ensure sediment has settled and water has been purged 1.2 Confirm storage containers or tanks are clean and of a suitable grade to store oil safely and to maintain quality, according to industry standards

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Wear appropriate personal protective clothing and ensure correct fit 1.4 Rack-off purged oil into clean storage tanks, filtering where required 1.5 Seal storage tanks to avoid oxidation 1.6 Ensure the storage space is clean, according to workplace standards
2. Operate and monitor storage	2.1 Move containers of virgin olive oil to storage area using manual handling aids 2.2 Check temperature of olive oil to ensure it is less than 20°C 2.3 Monitor the storage environment and equipment to ensure conditions remain ideal for product 2.4 Identify, adjust and report out-of-specification equipment, product or process outcomes according to workplace requirements 2.5 Follow and apply workplace housekeeping procedures and environmental requirements 2.6 Maintain workplace records according to workplace requirements
3. Monitor stored product	3.1 Monitor the virgin olive oil to confirm that storage conditions maintain the quality of oil 3.2 Take samples and test product to ensure specifications are met 3.3 Maintain batch records of product, according to workplace requirements

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
Reading	- Interpret workplace and standard operating procedures relevant to work task - Interpret storage requirements

Skill	Description
Writing	Record storage and product information using digital and/or paper-based format
Numeracy	- Monitor and interpret storage control indicators including time, temperature, volume (L, hL) - Interpret test results, including free fatty acid (FFA) (% m/m), oil oxidation, peroxide value (PV) (meq O₂/kg oil)

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOIL3012 Operate and monitor storage of virgin olive oil	Not applicable	The unit has been created to address a skill or task required by industry that is not covered by an existing unit	Newly created

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 FBPOIL3012 Operate and monitor storage of virgin olive oil

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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 the storage of at least one batch of virgin olive oil, including:

- applying safe work procedures
- following food safety procedures
- monitoring and adjusting the storage environment and equipment to achieve required outcomes
- taking corrective action in response to typical changes in the storage environment.

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:

- Australian Standard for Olive Oils and Olive-Pomace Oils (AS 5264-2011)
- Australian Olive Industry Code of Practice
- the flow of the holding and storage process and the effect of product output on downstream processes
- contamination/cross-contamination and food safety risks associated with the holding and storage process, and related control measures
- time required for oil to settle
- settling of olive oil, including the processes of purging, racking-off and filtration
- when filtration is required
- ideal storage conditions for virgin olive oil, including temperature, container properties, length of time product is stored
- organoleptic properties of different types of olive oil
- factors that accelerate the breakdown of virgin olive oil, including:
 - exposure to air (oxidation)
 - heat

- light (and using transparent containers)
- contact with sediments and water (hydrolysis)
- delayed processing of harvested fruit (causing fermentation)
- processing damaged (high FFA) fruit (diseased, mummified, split, over-ripe, frosted), which will result in defective oils
- variety and style (oxidative stability)
- time
- types of containers used to store bulk olive oil, and their characteristics
- techniques used to monitor the holding and storage process, including inspecting, measuring and testing by the process
- characteristics of different types of olive oil (extra virgin, virgin, refined, light, pomace)
- sampling methods
- typical tests undertaken to determine the quality of olive oil, including tests to detect alteration and refining processes, including soft deodorisation
- parameters that identify olive oil as fresh, well processed and stored appropriately, including:
 - free fatty acids (FFAs) in the vicinity of ≤ 0.4
 - peroxide value (PV) in the vicinity of ≤ 12
 - K232 values under 2.00 and K268 values under 0.18
 - pyropheophytin a (PPP) < 1 % of PPPs (which will increase 6–8 % per year, under ideal storage conditions)
 - around 90% of 1,2-diacylglycerols (DAG) (which will decrease 20–25 % per year, under ideal storage conditions)
- common olive oil defects and how each is caused:
 - fusty
 - musty
 - winey (vinegary)
 - muddy (sediment)
 - rancid
- methods for maintaining oil temperature during storage or distribution
- health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- environmental issues and controls relevant to the process, including disposal of waste water and defect products
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitisation procedures required for the storage containers, storage area and equipment
- recording requirements to ensure traceability and biosecurity of product.

Assessment Conditions

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

- physical conditions:
 - a food storage workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing
 - holding and storage equipment and related services
 - olive oil for storage/containers
 - sampling and testing equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - product specifications, control points and processing parameters
 - information on equipment capacity and operating parameters
 - sampling schedules and test procedures production
 - recording requirements and procedures.

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

Links

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