Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceuticals Training Package version 2.0 |

| FBPCEL3001 | Perform second distillation (pot still brandy) operations |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to operate a pot still for the second distillation.The unit applies to individuals who take responsibility for their own work using discretion and judgement in the selection and use of available resources.Legislative requirements relating to distilling alcohol apply to this unit. Users are advised to check current requirements with the Australian Tax Office (ATO), and state / territory liquor licensing and health agencies.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. |
| Prerequisite Unit | Nil  |
| Unit Sector | Cellar Operations (CEL) - Cellaring |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare the second distillation process for operation | 1.1 Interpret and confirm work instructions and identify potential WHS hazards and controls in accordance with workplace procedures 1.2 Select and use personal protective clothing and equipment relevant to the job role 1.3 Confirm availability and prepare product and materials to meet production requirements1.4 Confirm services are available and ready for operation1.5 Check equipment and confirm readiness for use according to manufacturer specifications and workplace procedures1.6 Set the process to meet production requirements |
| 2. Operate and monitor the second distillation process | 2.1 Start up the distillation process safely according to workplace procedures2.2 Monitor control points to confirm equipment and performance is maintained within specification 2.3 Confirm that distillate meets specification2.4 Identify, rectify and report out-of-specification product, process and equipment performance |
| 3. Shut down the second distillation process | 3.1 Shut the process down according to workplace procedures3.2 Dismantle equipment safely and prepare for cleaning3.3 Collect, treat and dispose of or recycle waste generated by both the distillation process and cleaning procedures3.4 Conduct work in accordance with workplace environmental guidelines3.5 Record workplace information according to workplace requirements and format |

| Foundation SkillsThis 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 textual information to identify key information in workplace procedures, work instructions and manufacturer specifications
 |
| Writing | * Complete workplace records relating to second distillation operation accurately
 |
| Numeracy | * Interpret symbols and numbers to calibrate equipment, set process parameters and monitor control points in second distillation operations
* Measure volume and alcohol conversion rates
 |
| Oral communication  | * Ask questions to clarify work instructions and use accurate industry terminology to report issues
 |
| Navigate the world of work | * Recognise and follow workplace procedures, including safety and legislative requirements, associated with own role and area of responsibility
* Take responsibility for decisions made to meet production requirements
 |
| Interact with others | * Follow accepted workplace practices and protocols for communicating information
 |
| Get the work done | * Organise and assemble resources and conduct multiple tasks to meet second distillation operation requirements, monitoring and adjusting processing parameters to achieve production requirements
* Recognise risks, hazards and routine problems related to second distillation operation and initiate workplace procedures to resolve or report
* Use key features and functions and follow routine procedures for using digital technology or systems to record and/or report workplace information
* Recognise and act on opportunities for continuous improvement in accordance with workplace practices
 |

|  |
| --- |
| Unit Mapping Information |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPCEL3001 Perform second distillation (pot still brandy) operations | FDFCEL3001A Perform second distillation (pot still brandy) operations | Updated to meet Standards for Training PackagesMinor changes to elements and performance criteria for clarityRemoval of prerequisites due to no longer required by industry | 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 FBPCEL3001 Perform second distillation (pot still brandy) operations |
| --- | --- |
| 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 demonstrated the second distillation process on at least two separate occasions, including:* accessing and interpreting workplace information to identify distillation requirements
* selecting, fitting and using personal protective clothing and equipment
* confirming supply of necessary product, materials and services
* preparing product and materials for second distillation operations
* setting up and starting up the process, including any tests or procedures required by legislation or regulations
* monitoring the process and equipment operation to identify out-of-specification results or non-compliance
* taking corrective action in response to out-of-specification results or non-compliance
* taking samples and conducting tests
* conducting work safely following work health and safety procedures
* shutting down equipment in routine and emergency situations
* preparing equipment for cleaning including draining and dismantling equipment, removing waste either manually or by rinsing in preparation for cleaning and sanitation
* following workplace procedures for compliance with legislation and regulation requirements.
 |

| 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 principles of second distillation operations, including definition of the following terms:
* second distillation
* heads or feints
* heart
* tails or oils (higher alcohols)
* brandy spirit
* alcoholic content of distillation product and final product
* legislation, regulation and workplace licence requirements related to fortified spirits:
* Australian Taxation Office (ATO)
* border control
* customs and excise
* link to related processes, including the preparation of the product to be distilled and any further processing requirements of the distillate
* effect of speed of distillation on distillate and by-products
* quality characteristics and uses of a range of distillation products:
* fortifying spirit
* commercial and premium brandy
* product and materials preparation requirements and effect of variation on the process
* process specifications, procedures and operating parameters:
* individual still capacities
* boiler pressure
* alcoholic strength
* critical temperatures
* cooling water flow rate
* condensate rate or flow (speed)
* safety and vacuum valves
* distillers specifications
* distillation equipment and instrumentation components, purpose and operation
* basic operating principles of process control systems
* sampling and testing procedures required for second distillation operations
* significance and method of monitoring control points within the process
* common causes of variation and corrective action
* shutdown and cleaning requirements associated with changeovers and types of shutdowns
* workplace health and safety hazards and controls:
* hazardous properties of ethanol
* emergency flooding procedures
* emergency evacuation procedures
* handling procedures of spirits
* ATO requirements relating to own role and area of responsibility
* workplace procedures and responsibility for:
* reporting problems
* environmental issues and controls
* recording requirements
* waste handling requirements
* routine maintenance.
 |

| 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 for second distillation operations
* pot still and distillation equipment and materials required for production
* cleaning materials, equipment and procedures
* documentation or technology for recording and reporting information
* specifications:
* ATO requirements relating to own role and area of responsibility
* work instructions and workplace procedures for second distillation operations.

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> |