Modification history

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

| FBPCEL2007 | Prepare and monitor wine cultures |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to prepare and monitor yeast and bacterial cultures used in wine production and to inoculate product according to set specifications and may involve work in confined spaces.  The unit applies to individuals who work under general supervision, with limited autonomy and accountability for their own work.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication  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) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for inoculation | 1.1 Confirm work instructions and identify potential work health and safety (WHS) hazards and controls in accordance with workplace procedures  1.2 Select and use personal protective clothing and equipment (PPE) relevant to the job role  1.3 Identify and confirm propagation requirements  1.4 Prepare yeast and bacterial cultures for use according to workplace procedures  1.5 Confirm availability and prepare product and materials to meet specified propagation requirements  1.6 Confirm services are available and ready for operation |
| 2. Prepare equipment for culture preparation | 2.1 Confirm cleaning and sterilising equipment is ready for use  2.2 Select, clean and sterilise propagation equipment and transfer equipment according to workplace procedures |
| 3. Maintain and monitor the propagation process | 3.1 Conduct transfer operations to meet propagation requirements  3.2 Conduct the culture propagation process using safe work practices  3.3 Inoculate ferments following work instruction  3.4 Monitor control points to confirm performance is maintained within specification  3.5 Monitor equipment to confirm operating condition  3.6 Identify, rectify and report out-of-specification product, process and equipment performance |
| 4. Complete propagation activities | 4.1 The propagation process is completed according to workplace procedures  4.2 Dismantle equipment safely and prepare for cleaning  4.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures  4.4 Conduct work according to workplace environmental guidelines  4.5 Record workplace information according to workplace procedures and format |

| 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 textual information from a variety of workplace documents |
| Writing | * Record workplace information using industry-based vocabulary, grammar and conventions |
| Oral Communication | * Converse clearly using industry-specific language |
| Numeracy | * Calculate numerical information relating to measurements, quantities and operational specifications * Interpret symbols and numbers to calibrate equipment and monitor control points |
| Navigate the world of work | * Follow clear instructions within defined level of responsibility * Recognise own work performance and seek assistance where required |
| Get the work done | * Recognise and act on opportunities for continuous improvement in accordance with workplace practices * Use the main features and functions of digital tools to identify and apply information in wine industry operations * Respond to routine problems using step-by-step instruction and procedures |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPCEL2007 Prepare and monitor wine cultures | FDFCEL2007A Prepare and monitor wine cultures | Updated to meet Standards for Training Packages  Minor changes to elements and performance criteria for clarity  Removal of prerequisite as 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 FBPCEL2007 Prepare and monitor wine cultures |
| --- | --- |
| 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 following on at least two separate occasions:   * accessing workplace information to identify culture propagation requirements * selecting, fitting and using personal protective clothing and equipment * confirming supply of necessary product, materials and services * checking and confirming readiness of equipment before operation * checking and preparing product and any additions, including checking of quality of wine yeast and bacterial cultures before use * starting inoculation process according to instructions * monitoring inoculation process control points for performance against specifications * taking appropriate corrective action for out-of-specification process and equipment performance * shutting down equipment in routine situations * preparing equipment for cleaning including draining and dismantling equipment, in preparation for sanitation * conducting work safely following work health and safety procedures. | |

| 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 propagating wine yeast and bacterial cultures * relationship of propagation to alcoholic and malolactic fermentation * stages and changes which occur during culture propagation and the effect of process stages on the end product * quality characteristics and uses of wine yeast and bacterial cultures * product and materials preparation requirements and effect of variation on the process * main methods used in culturing yeast and bacteria for wine production * basic features of fermentation reaction for yeast and bacterial cultures * techniques that may be used to manipulate the propagation process and wine characteristics: * temperature * yeast variety or strain * Baumé scale / hydrometer * additions * pH * oxygen * process specifications, procedures and operating parameters for preparing wine cultures * equipment and instrumentation components, purpose and operation * basic operating principles of process control systems * significance and method of monitoring control points within the process * common causes of variation and corrective action required * shutdown and cleaning requirements associated with changeovers and types of shutdowns * work health and safety hazards and controls, specifically confined space entry * workplace procedures and responsibility for: * reporting problems * environmental issues and controls * waste handling requirements * recording requirements. |

| 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 wine culture operations * equipment and materials for wine culture process * yeast and/or bacterial cultures and products and materials required for wine culture process * documentation or technology for recording and reporting information * specifications: * work instructions and workplace procedures for wine culture 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> |