**NZQA**

**Approved**

Achievement standard: 91353 Version 3

Standard title: Demonstrate understanding of advanced concepts used in preservation and packaging for product storage

Level: 2

Credits: 4

Resource title: The secrets of storing wine

Resource reference: Processing Technologies VP-2.62 v2

Vocational pathway: Services Industries

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| Quality assurance status | These materials have been quality assured by NZQA.  NZQA Approved number A-A-02-2015-91353-02-8277 |
| Authenticity of evidence | Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material.  Using this assessment resource without modification may mean that learners’ work is not authentic. Assessors/ educators may need to change figures, measurements or data sources or set a different context or topic to be investigated or a different text to read or perform. |

Vocational Pathway Assessment Resource

Achievement standard: 91353

Standard title: **Demonstrate understanding of advanced concepts used in preservation and packaging for product storage**

Level: 2

Credits: 4

Resource title: The secrets of storing wine

Resource reference: Processing Technologies VP-2.62 v2

Vocational pathway: Services Industries

Learner instructions

# Introduction

This assessment activity requires you to demonstrate understanding of advanced concepts used in the preservation and packaging for wine storage.

You are going to be assessed on how comprehensive your understanding is of advanced concepts used in the preservation and packaging for wine storage.

The following instructions provide you with a way to structure your work so you can demonstrate what you have learnt and achieve success in this standard.

Assessor/educator note: It is expected that the assessor/educator will read the learner instructions and modify them if necessary to suit their learners.

# Task

You are to prepare a presentation on the different ways wines are preserved, packaged, stored and transported around New Zealand.

Gather information, examples, and evidence to use in your presentation.

This will include:

* the different types of decay that could occur typically in the production of wine
* the different types of preservation, packaging, and storage methods used for wines that are transported around New Zealand, including barrels, bottles, and plastic bladders used in cask wines
* the labelling and marketing requirements for New Zealand
* the use of labelling as a marketing or promotional technique in a national environment.

Consult with your assessor/educator and agree on an appropriate form for your presentation. You could include photographs with annotations, written discussions, diagrams, and tables.

Prepare a presentation in which you:

* explain why a particular combination of preservation and packaging techniques was chosen for storage in a national environment
* consider the advantages and limitations of a range of preservation and packaging techniques that would enable wine to be stored and transported around New Zealand
* consider the positives and limitations of each method and explain how each type of preservation and packaging limits the decay and maintains the product’s integrity as it is transported around the country
* discuss the labelling requirements for wine and how labels could be used as a marketing tool.

# Resources

The following resources may be useful:

* Murano, P 2002, *Understanding Food Science and Technology*, Brooks Cole
* Campbell-Platt, G 2009, *Food Science and Technology*, Wiley Blackwell
* Hutton, T June 2004, *Food Preservation: An Introduction*, Campden & Chorleywood Food Research Association
* Hutton, T August 2003, *Food Packaging: An Introduction*, Campden & Chorleywood Food Research Association
* Wine labelling and composition <http://www.foodsafety.govt.nz/industry/sectors/wine/labelling-composition/>
* *Fermented Fruits and Vegetables: A Global Perspective* [www.fao.org/docrep/x0560e/x0560e08.htm](http://www.fao.org/docrep/x0560e/x0560e08.htm)
* Selecting products and production methods [www.fao.org/docrep/W6864E/w6864e08.htm](http://www.fao.org/docrep/W6864E/w6864e08.htm)
* Drevescraft, J *Bottling, start to finish, Winemaker magazine, Summer 1998* <http://www.winemakermag.com/stories/techniques/article/indices/10-bottling/102-bottling-start-to-finish>

Vocational Pathway Assessment Resource

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Assessor/Educator guidelines

# Introduction

The following guidelines are supplied to enable assessors/educators to carry out valid and consistent assessment using this internal assessment resource.

As with all assessment resources, education providers will need to follow their own quality control processes. Assessors/educators must manage authenticity for any assessment from a public source, because learners may have access to the assessment schedule or exemplar material. Using this assessment resource without modification may mean that learners' work is not authentic. The assessor/educator may need to change figures, measurements or data sources or set a different context or topic. Assessors/educators need to consider the local context in which learning is taking place and its relevance for learners.

Assessors/educators need to be very familiar with the outcome being assessed by the achievement standard. The achievement criteria and the explanatory notes contain information, definitions, and requirements that are crucial when interpreting the standard and assessing learners against it.

# Context/setting

This activity requires learners to demonstrate comprehensive understanding of advanced concepts used in preservation and packaging for storage. They are required to investigate a range of methods used to preserve wine. The methods being investigated must be those that would enable the product to be packaged, stored and transported around New Zealand. Individual eco-friendly wine bottle packaging could also be considered.

# Conditions

This is an individual task. The learner’s presentation could be in the form of a slideshow, display board, portfolio, or written report, and could include annotated flow diagrams with written discussion, photographs and drawings. The learner should confirm with the assessor/educator, the format of their presentation.

# Resource requirements

Learners will require internet access to suitable reference material.

# Additional information

None.

# Assessment schedule: Processing Technologies 91353 – The secrets of storing wine

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| Evidence/Judgements for Achievement | Evidence/Judgements for Achievement with Merit | Evidence/Judgements for Achievement with Excellence |
| The learner demonstrates understanding of advanced concepts used in preservation and packaging for wine storage by:   * describing the links between preservation and packaging techniques for wine and types of decay * describing how wine could be effectively preserved, packaged and stored to maintain product integrity in a national environment   For example:   * + the learner describes how wine is effectively preserved and packaged to prevent different types of decay. The description covers storage techniques used for nationwide distribution   + the preservation techniques may include use of sulphur dioxide, fermenting, and vacuum packing   + the packaging techniques may include barrels, bag in box, glass bottles, cardboard cartons, bulk packaging and intermediate bulk containers   + individual eco-friendly wine bottle packaging may also be considered   + the decay types may include microbiological growth, separation, loss of colour, loss or gain of moisture, loss of viability, loss of nutritional content, quality loss due to enzymatic action, vibration, and shock and crushing during transport and handling   + the description includes the use of the correct technical terms, and gives the details of what the preservation and packaging techniques do to prevent the decay types. * describing legal and marketing requirements for labelling in a national environment   For example:   * + the description includes the legal labelling requirements for alcoholic beverages. Learners could annotate labelling showing the key features of this type of labelling (e.g. must have alcohol content information)   + the description of marketing requirements includes the identification and the purpose of brand names including those for individual products and groups of products, environmental information such as eco packaging, product recognition, brand name and communication of product values and image, promotion of product claims and point of difference (e.g. area grown).   *The above expected learner responses are indicative only and relate to just part of what is required.* | The learner demonstrates in-depth understanding of advanced concepts used in preservation and packaging for wine storage by:   * explaining the links between preservation and packaging techniques for wine and the types of decay * explaining why a particular combination of preservation and packaging techniques was chosen for wine storage in a national environment   For example:  The learner explains why wine products are produced and packaged in different ways to prevent decay and deliver the qualities required by consumers.  Reasons will be related to:   * + controlling and preventing different types of decay   + maintaining product integrity during storage and transportation in the national environment   + legal requirements for labelling and consumer   + expectations for marketing. * describing legal and marketing requirements for labelling in a national environment   For example:   * + the description includes the legal labelling requirements for alcoholic beverages. Learners could annotate labelling showing the key features of this type of labelling (e.g. must have alcohol content information)   + the description of marketing requirements includes the identification of and the purpose of brand names including those for individual products and groups of products, environmental information such as eco packaging, product recognition, brand name and communication of product values and image, promotion of product claims and point of difference (e.g. area grown).   *The above expected learner responses are indicative only and relate to just part of what is required.* | The learner demonstrates comprehensive understanding of advanced concepts used in preservation and packaging for wine storage by:   * explaining the links between preservation and packaging techniques for wine and the types of decay * explaining why a particular combination of preservation and packaging techniques was chosen for wine storage in a national environment   For example:  The learner explains why wine products are produced and packaged in different ways to prevent decay and deliver the qualities required by consumers.  Reasons will be related to:   * + controlling and preventing different types of decay   + maintaining product integrity during storage and transportation in the national environment   + legal requirements for labelling and consumer   + expectations for marketing. * comparing and contrasting preservation and packaging techniques of wine in a national environment   For example:  The learner compares and contrasts options for preservation and packaging for wine. The discussion includes the factors that are considered when selecting both preservation and packaging techniques for the product. Factors could include:   * + the action of the preservation method   + the performance attributes of the packaging material   + the financial and environmental considerations and the requirements of the distribution channel and the consumer. * discussing why labelling is legally required and how labelling for marketing is used in a national environment   For example:   * + the discussion includes the reasons why labelling is required in a food product sold nationally (e.g. legal requirements, consumer information). The discussion includes detail of the aspects covered in the labelling of a product containing alcohol, the rationale behind each aspect and the reasons for its inclusion   + the discussion includes the use of design features such as colour and text on the labelling to tempt prospective customers within a target market to purchase the product.   *The above expected learner responses are indicative only and relate to just part of what is required.* |

Final grades will be decided using professional judgement based on an examination of the evidence provided against the criteria in the Achievement Standard. Judgements should be holistic, rather than based on a checklist approach.