AWRI Australian Wine Research Institute

Fact Sheet
WINEMAKING

Energy Declarations on Australian Wine



Introduction

On 13 August 2025, Food Standards Australia New Zealand (FSANZ) introduced new labelling requirements for alcoholic beverages (FSANZ, 2025). Wine labels are to display a truncated Nutritional Information Panel (NIP) that includes the energy value. There is a three-year transition period ending 13 August 2028 after which wines must comply with the new requirements.

To aid in determining the value for this energy declaration, FSANZ have created a calculator specifically for alcoholic beverages (Online Calculator | Food Standards Australia New Zealand). This fact sheet outlines the inputs required for this calculator to provide a compliant nutritional energy content value for wine, while ensuring that unnecessary additional chemical analysis is not undertaken.

About the calculator

The calculator is built around the requirements for calculating the nutritional energy content of foods found in FSANZ Standard 1.2.8 “Nutritional Information Requirements”. It is consistent with previous advice for calculating the nutritional energy values for wine outlined in Wilkes (2021a).

The calculator is designed to generate information for a wide range of alcoholic beverages and includes some parameters that are not relevant for wine because they are either not present in wine or they are present at such low quantities that they would have a negligible contribution to the calculated energy value of wine.

The advice contained in this factsheet is for dry and semidry wines between 0 and 12 g/L of sugar, and alcohol between 7 and 15 percent alcohol by volume (%ABV). For products outside these ranges, it is advisable to seek advice from the AWRI helpdesk for the values to be entered.

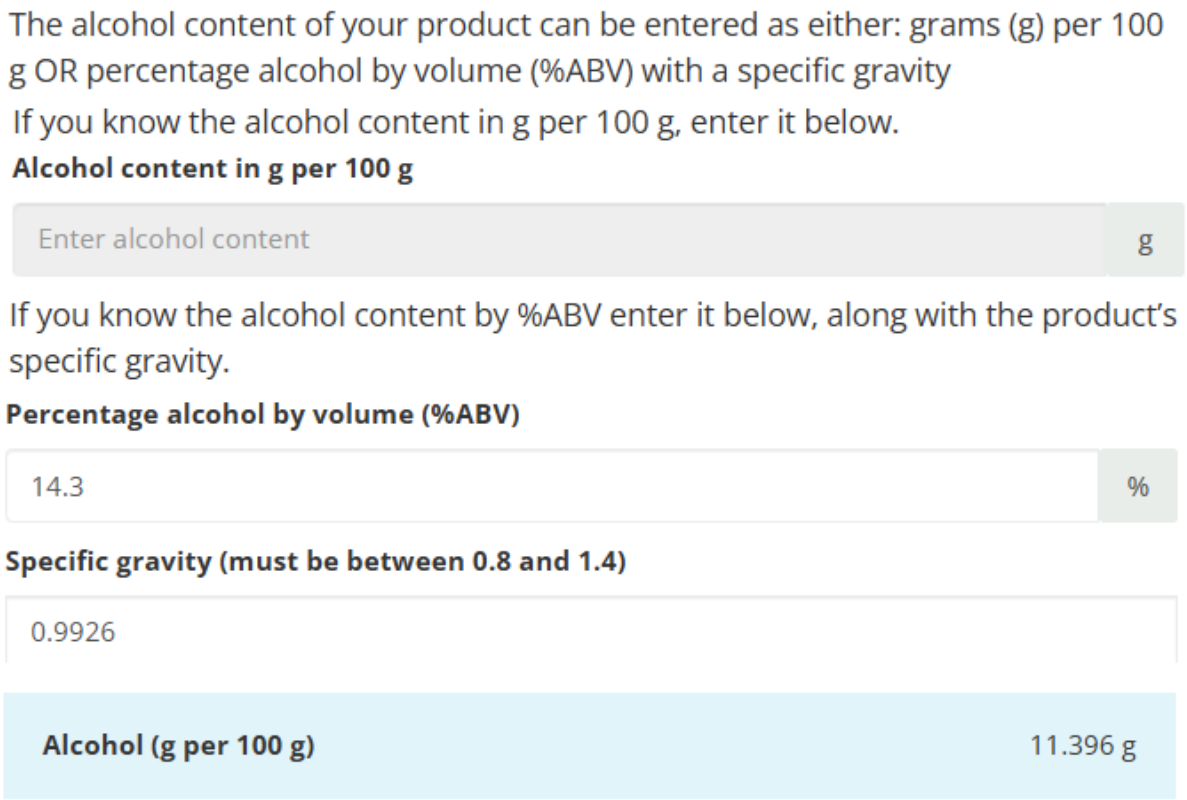
Some parameters in the calculation, for example glycerol, can be filled with typical values (Wilkes 2021b) because the expected variation in concentration of these components makes a negligible difference to the calculated energy value.

How to use the calculator

Step 1 – Enter the alcohol content of your product

The first page of the calculator requires the alcohol content expressed as either grams per 100 g of content (g/100g), or %ABV. These values would typically be provided in laboratory analysis undertaken prior to bottling to support labelling requirements. Most wine laboratories will express alcohol results as %ABV.

If using a percentage ABV value for the calculation, you must also enter the specific gravity of the wine. If the specific gravity of the actual wine is not available, typical values: 0.9926 for red wine and 0.9951 for white wine will give an acceptable result. These specific gravity values have been derived from the results of surveys of more than 1300 dry and semi-dry wines analysed at the AWRI's Affinity Labs which showed differences in final energy values of less than 3 kJ per 100 g, or less than 1%.



Step 2 – Calculate the energy content per 100 g (kJ/100g)

On the second page of the calculator, enter wine-specific values for 'Available carbohydrate' (sugar), 'Organic acids' and 'Glycerol'. The units required are grams per 100 grams (g/100g), not the more commonly used wine units of grams per litre (g/L). To convert units from g/L to g/100g, divide the value by 10. The error introduced when converting litres to grams is negligible.

Available carbohydrate

For the available carbohydrate entry, a measured sugar value can be used. This can be a value for glucose + fructose or a reducing sugar value. While these two different values provide slightly different energy values, the impact is negligible. If a measured sugar value is unavailable, typical values may be used. For dry wines (<4 g/L residual sugar), typical values of 0.1 g/100g may be used for red wine and 0.2 g/100g for white wine. If a wine is off-dry or has had added grape juice or grape juice concentrate, then a measured value should be used.

Organic acids

It is reasonable to assume a typical organic acids concentration of 0.6 g/100g for both red and white wine based on AWRI survey data (Wilkes 2021b).

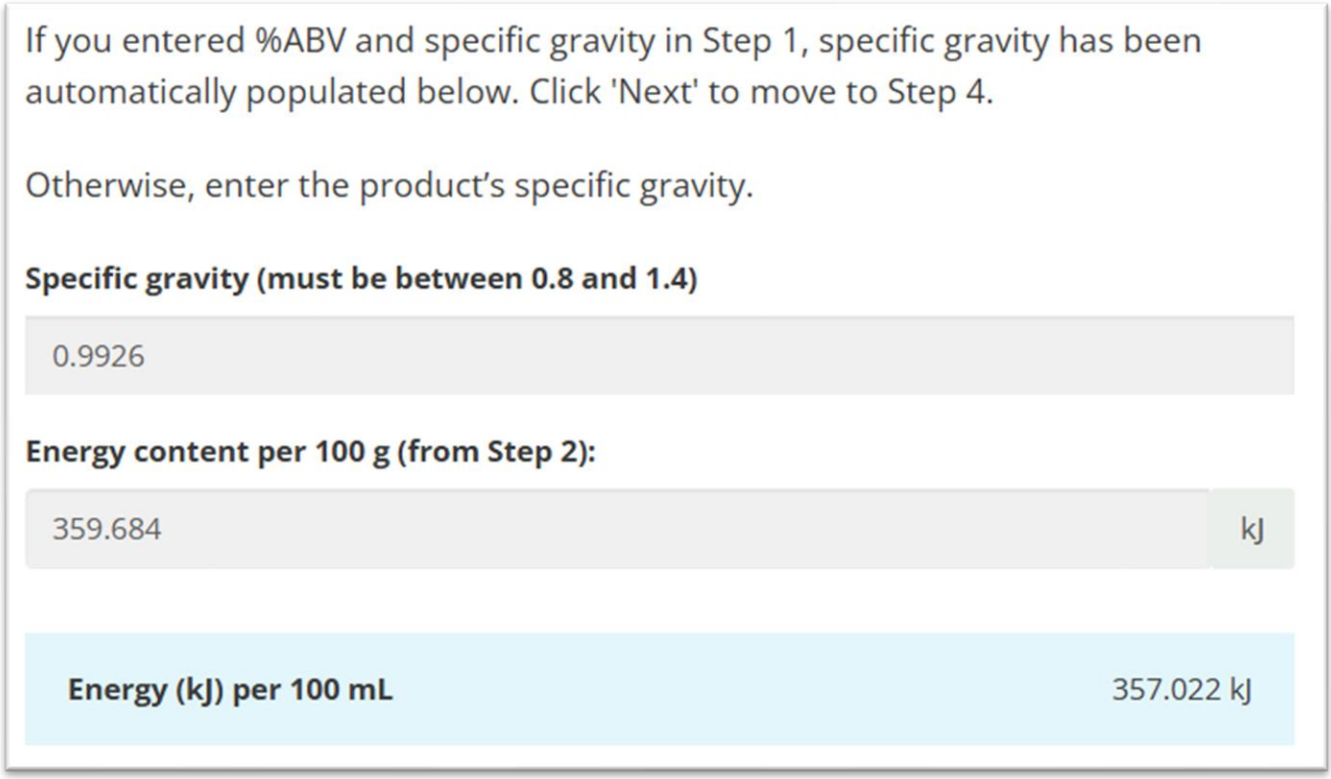
Glycerol

It is reasonable to assume a typical organic acids concentration of 0.5 g/100g for white wines and 1.0 g/100g red wines, based on AWRI survey data (Wilkes 2021b).

Fat	0 g	**Lactitol**	0 g
Protein	0 g	**Maltitol**	0 g
Available carbohydrate	0.2 g	**Mannitol**	0 g
Fibre (and unavailable carbohydrate)	0 g	**Organic acids**	0.6 g
D-allulose	0 g	**Polydextrose**	0 g
Erythritol	0 g	**Sorbitol**	0 g
Glycerol	1 g	**D-tagatose**	0 g
Isomalt	0 g	**Xylitol**	0 g

Step 3 – Convert energy in kJ per 100 g to kJ per 100 mL

If a specific gravity value was entered at step 1, there is no need to add any further information on this page.

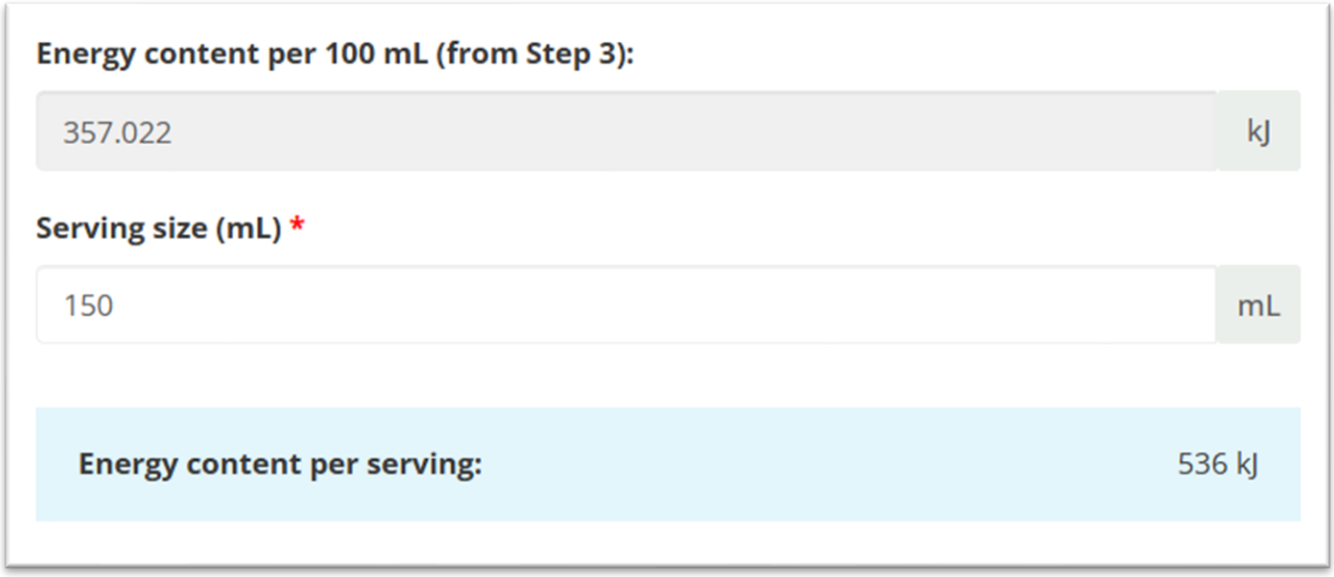


Step 4 – Calculate energy in kJ per serving in mL

This step of the calculator converts the energy value to kJ/serving, required to be shown on the NIP in addition to the energy in kJ/100mL. While a standard serve is not defined under the food code, the Australian Government's Department of Health, Disability and Ageing considers:

- an average restaurant serving of red/white/sparkling wine to be 150 mL;
- a standard serve of red/white/sparkling wine to be 100 mL; and
- a standard serve of fortified wine to be 60 mL.

For the purpose of this example, a serving size of 150mL is used. The value entered into the calculator is at the discretion of the producer



Step 5 – Calculate the number of standard drinks per serve

The final page of the calculator requires entry of the number of standard drinks and the number of servings per container.

FSANZ Standard 2.7.1 defines a standard drink as: *"the amount that contains 10 grams of ethanol when measured at 20°C"*

It may be calculated using the formulae:

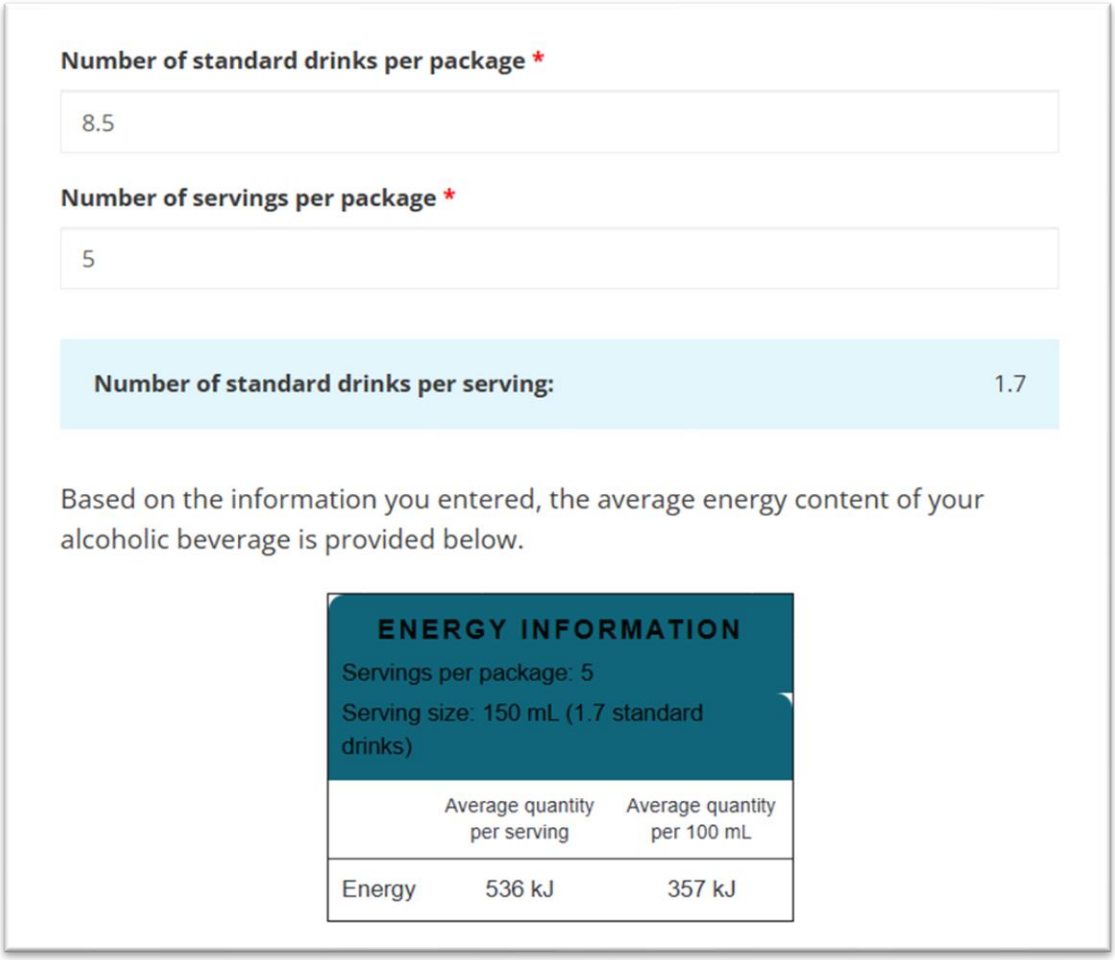
Container volume (litres) x %ABV x 0.789.

For example, a 14.3% red wine in a 750 mL bottle:

0.75 x 14.3 x 0.789 = 8.5 standard drinks per container (bottle).

The number of serves per package is calculated by dividing the package volume (mL) by the serving size (mL):

750 ÷ 150 = 5 serves per package



Acknowledgement

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Reference and further reading

Food Standards Australia New Zealand, 2025. Approval report – Proposal P1059 Energy labelling on alcoholic beverages.

Food Standards Australia New Zealand, 2025 Standard 2.7.1 – Labelling of alcoholic beverages and food containing alcohol

Food Standards Australia New Zealand, 2024 Standard 1.2.8 – Nutrition information requirements

Wilkes, E. 2021a. Style-based energy content categories in Australian wine. AWRI Tech. Rev. 254.

Wilkes, E. 2021b. Impact of wine components on energy label calculations. AWRI Tech. Rev. 253.

Wine Australia, 2025. Fact Sheet- Compulsory energy labelling in Australia and New Zealand from August 2028. Wine Australia guidance document for producers.

Contact

For further information on energy calculations, please contact the AWRI helpdesk team.

Phone 08 8313 6600 **Email** helpdesk@awri.com.au

Website awri.com.au

Address Wine Innovation Central Building, Corner of Hartley Grove & Paratoo Rd, Urrbrae (Adelaide), SA 5064

For further information on labelling requirements, please contact:

Wine Australia

Phone (08) 8228 2000 **Email** labels@wineaustralia.com