

Allergen labelling requirements in the Australian wine industry (Journal article)

by James Omond, 28 January 2003

As of December 2002, the Australia and New Zealand Food Standards Code requires wines (as well as all other foodstuffs) to carry a declaration on their labels if they contain any recognised “allergens”.

This relatively simple statement has led to a lot of debate and consternation in the Australian wine industry as to what it means in practice.

On the one hand, you had the Australian Wine Research Institute initially quoted as saying it’s OK to state on your label “This wine has been fined with ... [e.g. isinglass] and traces may remain”, whilst the Australian Wine and Brandy Corporation told us that Food Standards Australia and New Zealand (FSANZ) wouldn’t permit this –that “the law is not met by previously suggested wording/statements such as ‘may contain fish or milk product’”. FSANZ then confirmed their view that the law required a statement to the effect that the substance **is** in the product.

Another example was the statement in the AWBC’s wine law brochure that “Some manufacturers have indicated they will add a short background story eg. wine has traditionally been fined with milk etc, to allay any consumer fears about processes new to them.”

Compare this with what one wine company adviser told me: “If you’re in a bottle shop looking for a wine, and one back label says it might contain fish guts, and the next one doesn’t, which is the average punter going to buy?” This sort of thinking is behind the view that, unless the industry as a whole adopts the measure, and everyone uses the same labelling methodology, no one company will want to lead the industry by labelling for these allergens.

So should you or shouldn’t you? Do you have to declare, or don’t you?

Legislative requirement

Until this change came into effect, the Food Standards Code exempted wine from the ingredient labelling requirements – except in relation to colours, antioxidants and preservatives (e.g. sulphur dioxide)¹.

Under the new system, wine is still exempt from the ingredient labelling requirements. However, this exemption does not extend to the mandatory declaration required for the presence of potential allergens, a requirement that applies to all foodstuffs, including wines.

The exact wording of the Code is:

4 Mandatory declaration of certain substances in food

¹ Under the new regime, it is no longer necessary to include statements on wine labels for the presence of ascorbic acid, erythorbic acid, sorbic acid, potassium sorbate or caramel, although sulphur dioxide must still be labelled – but as a potential allergen, rather than as a preservative.

- (1) The presence in a food of any of the substances listed in the Table to this clause, must be declared in accordance with subclause (2), when present as:
- (a) an ingredient; or
 - (b) an ingredient of a compound ingredient; or
 - (c) a food additive or component of a food additive; or
 - (d) a processing aid or component of a processing aid.

Therefore, what the law actually says is that you must disclose if one of the substances in question² has been used in making the wine and, here's the important bit, **is present** in the final product.

The code requires label declaration of sulphite (an allergen, as well as a preservative) when present at concentrations of 10mg/kg or more. This is no different from the previous version of the code. It is in the area of process aids that the waters become murky.

Process Aid Residues

So what are the relevant processing aids, how can product be tested for them, and who determines whether or not they are present in wine if they have been used?

Based on the substances allowed for use in winemaking in Australia, the relevant processing aids are:

- Egg products - egg whites, lysozyme
 - Milk products - skim milk, casein, potassium caseinate, milk, whey spirit
 - Fish products – isinglass
- (as well as sulphites, mentioned above.)

Of course, the best option for those winemakers who do not wish to make label declaration for these substances is to cease using them. If wineries take this option, however, it is important that the status of any bought-in wine is known, and that treated and untreated wines are clearly identified and not blended, either intentionally or accidentally, without accounting for their respective allergen status.

² The allergens listed are:

- Cereals containing gluten and their products, namely, wheat, rye, barley, oats and spelt and their hybridised strains other than where these substances are present in beer and spirits standardised in Standards 2.7.2 and 2.7.5 respectively
- Crustacea and their products
- Egg and egg products
- Fish and fish products
- Milk and milk products
- Nuts and sesame seeds and their products
- Peanuts and soybeans, and their products
- Added Sulphites in concentrations of 10mg/kg or more
- Royal jelly presented as a food or royal jelly present in a food
- Bee pollen
- Propolis

Looking next at the ‘how’ of testing, it is generally recognised that it is the protein component of these materials that can trigger allergic reactions in sensitive subjects. Analytical processes for residues of egg and milk protein at ppm (parts-per-million) levels using a form of testing known as ELISA (enzyme-linked immunosorbent assay) are well established in the food industry. These analyses are used to verify claims that certain foods are free from dairy or egg products. This testing is now being applied to wine to investigate residues of those fining materials.

Richard Gibson, of Scorpex Wines Services, is a recognised expert in technical wine-industry matters. Gibson states that when wine is treated with the proteinaceous fining agents listed above, it can usually be assumed that complete removal of the active protein fractions occurs through interaction with target wine components such as phenols. Removal can be enhanced by co-fining with materials such as silica sol and tannin. However, if the fining process is not closely controlled, there may be a possibility of excessive addition and carry over of protein residues to the finished product. In addition, the use of milk releases lactose residues which are not removed by interaction with product components.

Gibson recommends that winemakers learn more about the residue status of their wines by having testing done at recognised laboratories. Combined with good traceability and control of post-analysis contamination, a clean slate from analysis indicates that product that has been fined with casein and egg products can be released to the market with no detectable residues.

He acknowledges that analysis by ELISA cannot test down to zero tolerance for these substances, but the limits of detection now available have been found suitable for risk management in the food industry, and should also provide similar information for the wine industry. If limits of detection drop due to advances in analysis methods, Gibson recommends that winemakers make use of the most sensitive techniques available.

In support of Gibson’s approach is the dearth of any case history or information on allergic reaction to any of these materials when they have been used as processing aids in wine, despite the long history of their use.

Gibson stresses that his views on this issue do not necessarily accord with everyone’s interpretation of the new Code. He says it is important when making a decision whether or not to label for allergens (if using them) to be aware of other commentators’ views.

At one end of the “conservative” spectrum is the approach that the use of any allergen in the winemaking process gives rise to the potential for some residue in the final product. In light of the new legislation, the potential for adverse health reactions, and an increasing desire by consumers to be informed of all ingredients in foodstuffs, the wine **must** be labelled with a statement referring to the allergen (irrespective of any testing which may fail to detect the presence of any such residue).

For example, in a press release issued by the Australian Wine Research Institute in September 2002, it was claimed that the new regulations would “require mandatory declaration on labels of wines, when substances that might provoke allergic reactions have been used in production”.

That said, Creina Stockley, who is the Information Manager for the Australian Wine Research Institute (AWRI), warns against basing decisions on what has been written in the past. Stockley says that this is an area where much has changed in the last six months, and will no doubt change again. Part of this is due to the element of interpretation that is required of the new regulations. The technology for assessing residues also has the potential to be rapidly improved in a short period of time, so that what cannot be detected or measured today, may be able to be tested accurately tomorrow.

She says that AWRI cannot give advice to winemakers about what and how to label (although it can discuss the issue), and refers winemakers instead to FSANZ, or their own independent legal advice.

Liability Issues

Although there is little or no evidence of significant allergic reactions to the processing aids used in wine in the past, that's not to say there will never be reactions to these materials. A reaction might be a result of the interaction of the allergen in the wine reacting with something in food eaten as an accompaniment, or perhaps some medicine or dietary supplement. The worst-case scenario is something like a severe anaphylactic reaction caused by the presence of the allergen, with the consumer dying as a result of consuming your wine. (From a legal perspective, this is not a good thing.)

And in the writer's experience, there will always be disgruntled consumers (and lawyers with questionable motives) who want to blame someone else for their own errors (or overindulgences) – even if the consequences are far less serious than the worst-case scenario.

Which leads to the third question posed above – who would bear the burden of proof if the authorities alleged a wine had been mislabelled, or if a consumer alleges that they have suffered an allergic reaction as a result of an undisclosed allergen used in the production of the wine?

In the former case, the burden should be on the authorities to prove that there are residues of the allergen in the finished product, using whatever testing that is open to them. (I say “should”, as this is unfortunately not clear.)

In the latter case, the action by the consumer would usually be brought under Part VA of the Trade Practices Act – Australia's “product liability” regime that allows a person who is injured or whose property is damaged as a result of defective (i.e. unsafe) goods to bring an action for compensation from the manufacturer without the need to prove negligence, breach of contract or breach of statutory warranty.

This is a ‘strict liability’ regime, although the claimant would nonetheless have to show that the goods had a ‘defect’ in them, and that the claimant suffered loss or damage as a result of this defect. It should be noted that ‘defective’ has a special meaning for this purpose, and would in all likelihood apply to wine shown to contain an allergen which was not labelled accordingly. That said, the onus should be on the consumer to show the presence of residues of the allergen. (For more on this issue, see “Product Liability in the Wine Industry”, <http://www.omond.com.au/publications.htm>)

As a matter of practice, consumer claims are often considered by winemakers as having no legal substance, because it is usually a case of ‘self-inflicted’ damage, with the consumer (spurred on by their lawyer) not wanting to take responsibility for their own actions. Notwithstanding this view, the cases are often settled because the payout is cheaper than the legal fees would be, and it also avoids the potential for poor publicity. If the plaintiff law firm is sufficiently aware of the issues in the wine industry, it will be able to use the allergen issue (if no disclosure is made on the label) as a further element to in such claims.

Other issues

Some of the literature published about allergen labelling has stated that the use of chestnut-derived tannin, used as an additive, will have to be declared on the label. However, it appears that most chestnut tannin in use is not actually derived from the nut – meaning that it is not an allergen. (The source of each tannin in use should be checked with the particular supplier.)

Richard Gibson warns that other products may also be relevant to this issue. For example, some suppliers are developing plant proteins as a replacement for gelatine as a fining agent. If these are derived from cereals, they will constitute a potential allergen. Likewise, any caramel (used for colouring in fortified wines) may be derived from cereal products. Many sparkling wine corks and technical closures contain casein glue.

Clinical Study of Effects

The Grape & Wine Research & Development Corporation is funding a two-year project (which started in June 2002) to determine the degree of risk on which to base future decisions on allergen labelling, and whether the industry should apply for certain exemptions. This project is being conducted by the Department of Allergy, Asthma and Clinical Immunology at The Alfred and Monash University in conjunction with AWRI.

Alfred / Monash Allergy Professor Robyn O’Hehir, who is involved with the study, has worked for 20 years as a consultant allergist. She says that in that time she has have never seen a patient with a true allergy to wine. However, O’Hehir says that whilst she does not believe these prescribed substances cause any allergies, it is important to investigate properly so consumers can be certain of the effects of drinking wines.

Professor O’Hehir says the study will include extremely sensitive laboratory and clinical tests to see whether traces of milk, egg, nut or fish products in wines could affect consumers.

The laboratory component will examine the chemical make- up of 100 different Australian wines to determine whether they contain traces of allergy inducing substances, and if so, exactly how much.

The clinical component will involve testing whether participants have allergic reactions to various wines, both through skin tests and through drinking the wines. Participants will include a group of patients who are known to be highly allergic to various substances as well as a group who do not have allergies.

Further developments

The EU has published similar legislation, which is set to take effect in 2005. One industry source says this will make for interesting viewing, as the EU has not even required the labelling of sulphur dioxide, so the change will require a large amount of consumer education for that substance alone, let alone other prescribed allergens (such as egg-whites, used extensively throughout France). By way of example, an Australian wine was sent to the UK with a domestic back label, which disclosed the use of SO₂ – the company was inundated with queries as to when they had started using SO₂!

The wording of the EU Directive is the same as the Australian legislation, in that it requires a declaration if the substance is **present** in the finished product. Both countries' legislation is based on the Codex Alimentarius (the United Nations body responsible for food labelling standards and guidelines).

The requirements of the Code apply to all wine sold in Australia and New Zealand (irrespective of their country of origin) . Imports should therefore be meeting the new label declaration regulation. It is not clear whether (or how) this will be implemented and enforced.

Although there is no ELISA testing method available for the presence of fish product residues (such as isinglass), new forms of DNA testing (PCR – polymerase chain reaction testing) are being developed to test for the presence of bovine or fowl DNA in products, so this may be extended to testing of fish products in the future. That said, Gibson notes that there is some uncertainty about whether sufficient DNA is present in fining materials, whether the DNA enters the wine matrix during fining and whether the DNA is sufficiently stable in wine to be a reliable indicator. More work is being carried out to evaluate the validity of this testing method in wine.

In terms of enforcement, it should be noted that FSANZ is not the regulatory body. The Food Standards Code is enacted through State legislation, and the individual States have control over how it is enforced in each jurisdiction. It is believed that the States will be meeting in February 2003 to try to decide a common approach on how this issue should be applied in relation to wines.

Conclusion

Those winemakers not wishing to include allergen declarations are faced with two choices. The first, and obvious, choice is cease the use of prescribed allergens in their winemaking (presumably excluding sulphites).

Those considering not labelling for the presence of allergens, when the prescribed substances have been used as processing aids, need to be aware that this may put them at odds with the authorities, and has the potential to increase their exposure to consumer claims (whether or not those claims have any substance).

The type of ‘due diligence’ which can be undertaken in such circumstances as part of a risk management strategy includes:

- ELISA testing of product by competent analysts to gain more information about the residue status of products for casein and egg products (wineries with good laboratory facilities and staff may even be able to do this themselves).
- if some wines have been treated with processing aids, and others have not, care should be taken not to mix them, to minimize the amount of the former;
- when using fining agents, keep the quantity to the minimum required to do the job, and in white wines use a co-fining agent (such as silica sol or tannin) to remove excess proteinaceous material.

A final word (or two) of warning:

- lactose residues cannot be removed from wine after milk fining, and can easily be detected by analysis. Under the Food Standards Code, this means that a label declaration should be made; and
- it is difficult to test for isinglass residues, so which makes it difficult to justify an approach that there are no residues of this material in wine, if it has been used.

For further reading on the topic, see

http://www.awbc.com.au/winelaw/wine_label_law_pdfs/WLLABL01Oct02.pdf, and “*To label or not to label for allergens*”, Creina Stockley and Robyn O’Hehir, The Australian Grapegrower and Winemaker, August 2002

Of course, as with all articles by lawyers, I have to end by telling you not to rely on this article as a substitute for specific legal (or technical) advice tailored to your own position.

I would also like to express my thanks to Richard Gibson for his invaluable assistance with some of the technical aspects of this paper. Richard can be contacted on (08) 8449 1700.

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