

EXECUTIVE SUMMARY

In the current version of the Table to clause 17 of 'Standard 1.3.3 – Processing Aids' in the Australian New Zealand Food Standards Code, the enzyme Carboxyl proteinase (3.4.23.6) from sources: *Aspergillus melleus*, *Aspergillus niger*, *Aspergillus oryzae* and *Rhizomucor miehei* is listed as one of the permitted enzymes. A nomenclature change by the international Union of Biochemistry and Molecular Biology (IUBMB) has superseded 3.4.23.6 and replaced it with twelve different enzyme numbers, related to their sources. These are: EC 3.4.23.18-28, 3.4.23.30. The purpose of this application is to request an amendment to the Table to clause 17 of Standard 1.3.3 to reflect this nomenclature change without providing broader permissions than the status quo position.

A review of the twelve enzymes that have replaced 3.4.23.6 shows that only three of the twelve can be sourced from any of the four microorganisms linked to the current enzyme permission. These three are: Aspergillopepsin I (3.4.23.18), Aspergillopepsin II (3.4.23.19) and Mucorpepsin (3.4.23.23). Since Mucorpepsin (3.4.23.23) is already listed in a separate entry of the Table to clause 17 of 'Standard 1.3.3 – Processing Aids', it can be discounted from this application. This leaves Aspergillopepsin I (3.4.23.18) from *Aspergillus niger* or *Aspergillus oryzae* and Aspergillopepsin II from *Aspergillus niger* (3.4.23.19) as the only two enzymes from the outdated classification 3.4.23.6 that can be sourced from the permitted microorganisms and are therefore relevant to this application.

The proposed nomenclature change is therefore to replace the current outdated entry:

Enzyme	Source
Carboxyl proteinase EC 3.4.23.6	<i>Aspergillus melleus</i> <i>Aspergillus niger</i> <i>Aspergillus oryzae</i> <i>Rhizomucor miehei</i>

With:

Enzyme	Source
Aspergillopepsin I (3.4.23.18)	<i>Aspergillus melleus</i> <i>Aspergillus niger</i> <i>Aspergillus oryzae</i> <i>Rhizomucor miehei</i>
Aspergillopepsin II (3.4.23.19)	<i>Aspergillus niger</i>

After conducting several years of trials, the Australian wine industry wishes to use a mixture of Aspergillopepsin I (3.4.23.18) and Aspergillopepsin II (3.4.23.19) as a processing aid in wine production. The enzyme mixture will be used to remove haze-forming proteins from grape juice, avoiding the need for later protein stabilisation of wine using bentonite clay. Due to the current entry for carboxyl proteinase in the table to clause 17 of Standard 1.3.3 having been superseded, the Australian wine industry does not currently have regulatory certainty regarding the use of these enzymes.