

18 August 2017

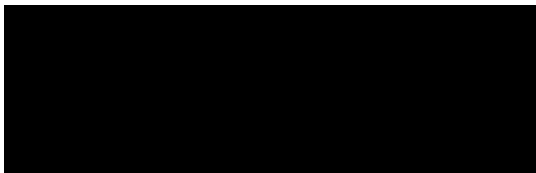
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Dear Sir/Madam

Attached are the comments that the New Zealand Food & Grocery Council wishes to present on ***Call for submissions – Application A1130 Triacylglycerol Lipase as a Processing Aid (Enzyme)***.

Yours sincerely



Katherine Rich





***Call for submissions – Application A1130  
Triacylglycerol Lipase as a Processing Aid  
(Enzyme)***

**Submission by the New Zealand Food & Grocery  
Council**

**18 August 2017**

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## NEW ZEALAND FOOD & GROCERY COUNCIL

1. The New Zealand Food & Grocery Council (“NZFGC”) welcomes the opportunity to comment on the **Call for submissions – Application A1130 Triacylglycerol Lipase as a Processing Aid (Enzyme)**.
2. NZFGC represents the major manufacturers and suppliers of food, beverage and grocery products in New Zealand. This sector generates over \$34 billion in the New Zealand domestic retail food, beverage and grocery products market, and over \$31 billion in export revenue from exports to 195 countries – some 72% of total merchandise exports. Food and beverage manufacturing is the largest manufacturing sector in New Zealand, representing 44% of total manufacturing income. Our members directly or indirectly employ more than 400,000 people – one in five of the workforce.

## THE APPLICATION

3. The application, made by Amano Enzyme Inc, seeks permission for a new microbial source of an enzyme already permitted as a processing aid used in the production of food in the Australia New Zealand Food Standards Code (the Food Standards Code), triacylglycerol lipase (EC number 3.1.1.3). The new source is from *Candida cylindracea*.
4. Triacylglycerol lipase catalyses the hydrolysis of various triglycerides (fats and oils) to produce free fatty acids and the subsequent various mono- and diglycerides. The new source of the enzyme that is the subject of the application selectively hydrolyses some of the fatty acids in preference to others which the applicant claims can produce flavour improvements of the final treated food. The enzyme is expected to be used primarily in the manufacture of bakery products and dairy products and in the processing of fats and oils.

## DETAILED COMMENTS

5. FSANZ has assessed many other sources of the enzyme triacylglycerol lipase (EC 3.1.1.3) over the past two decades starting in 1996 with *Aspergillus oryzae*, containing the gene for triacylglycerol lipase isolated from *Humicola lanuginosa* and most recently in 2010 with a protein engineered variant *Aspergillus niger*, containing the gene for triacylglycerol lipase isolated from *Fusarium culmorum*. NZFGC is therefore well aware of FSANZ’s familiarity with this group of processing aids which has provided a useful context for the current assessment.
6. FSANZ examined the evidence presented to support the proposed uses. FSANZ was comfortable that this provided adequate assurance that the enzyme, in the form and prescribed amounts, was technologically justified. The application also satisfies FSANZ’s view concerning the enzyme being a processing aid on the basis that it does not perform a technological purpose in the final food since it is inactivated.
7. FSANZ then considered whether the applicant had adequately demonstrated that the enzyme was effective in achieving its stated purpose and performing its technological function as a processing aid in the manufacture of bakery products, dairy products and the processing of fats and oil. The Call for Submissions confirms that FSANZ was satisfied this has been met.
8. Finally, the safety assessment conducted by FSANZ concluded that there were no safety concerns with the enzyme as a food processing aid.

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9. FSANZ then concluded that, in the absence of any identifiable hazard, an Acceptable Daily Intake (ADI) of 'not specified' was appropriate. A dietary exposure assessment was therefore not required. The enzyme preparation also met international purity specifications.
  10. NZFGC is pleased to support the listing of triacylglycerol lipase from this new source, *Candida cylindracea*, and therefore supports amendment of the relevant Table in Schedule 18 to reflect this result.