

Use of potassium polyaspartate as an additive for wine

EXECUTIVE SUMMARY

Potassium polyaspartate is the potassium salt of polyaspartic acid, produced from L-aspartic acid, which is a naturally occurring amino acid in wine, and potassium hydroxide (98% purity).

Studies have verified that potassium polyaspartate has stabilizing properties similar to those of the metatartaric acid (MTA) and carboxymethylcellulose (CMC), but is much more stable over time as well as filterable and unaffected by heat, which maintains the quality of the wine while increasing its cellaring or storage potential (shelf-life). Further, it does not have negative impacts on the sensory properties, such as colour, of the resultant wine. It is a completely biodegradable environmentally-friendly alternative to traditional polyanionic materials. Compared with physical stabilisation techniques such as cold stabilisation, electrodialysis and ion-exchange resins, use of potassium polyaspartate is labour, energy and water efficient, and hence cost competitive.

Potassium polyaspartate is thus proposed for use as a stabiliser against tartrate crystal precipitation in wine (red, rosé and white wine), sparkling wine and fortified wine at a maximum use level of 100 mg/L, depending on the level of instability of the wine to be treated.

The European Food Safety Authority (EFSA) evaluated the safety of potassium polyaspartate as a food additive and in its opinion of 9 March 2016 (EFSA Journal, 2016)¹ concluded that there was no safety concern from the proposed use in wine at a maximum use level of 300 mg/L and typical levels in the range of 100-200 mg/L.

It has accordingly been approved and authorised for use as an additive for wine in the European Union (EU) in COMMISSION REGULATION (EU) 2017/1399 of 28 July 2017 amending Annex II to Regulation (EC) No 1333/2008 of the European Parliament and of the Council and the Annex to Commission Regulation (EU) No 231/2012 as regards potassium polyaspartate and COMMISSION DELEGATED REGULATION (EU) 2017/1861 of 2 August 2017 amending Regulation (EC) No 606/2009 as regards certain oenological practices.² In addition, at the 50th session of the Codex Alimentarius Commission on Food Additives (JECFA), the EU and its Member States proposed that potassium polyaspartate used as a stabiliser in wine be added to the priority list of substances proposed for evaluation by JECFA.

To ensure consistency with international wine standards and to allow importation of wines, sparkling wine and fortified wines to which potassium polyaspartate has been added, it is requested to amend the table to section S15—5 of Schedule 15 *Substances that may be used as food additives* in the food category 14.2.2 Wine, sparkling wine and fortified wine to include potassium polyaspartate as an additive, at a maximum of 100 mg/L.

To enable potassium polyaspartate to be added to Australian produced wine, sparkling wine and fortified wine, it is also requested that Standard 4.5.1 Wine Production Requirements (Australia only) be amended to include potassium polyaspartate in the Table to clause 3, at a maximum of 100 mg/L.

Standard 1.3.4 requires that substances added to food, including additives, comply with relevant specifications as detailed in the Code. Potassium polyaspartate meets the OIV specification (OIV-OENO 572-2017), which is one of the secondary references for specifications in Standard 1.3.4 (Identity and Purity). Therefore, no new specification is required for the Code.

¹ EFSA Journal 2016;14(3):4435

² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1399&from=EN>