

ADVISORY COMMITTEE ON THE MICROBIOLOGICAL SAFETY OF FOOD
INFORMATION PAPER

Changes to plant protection product MRLs: potential impact on food safety

Issue

The purpose of this information paper is to make the Committee aware of changes to maximum residue levels (MRLs) for two quaternary ammonium compounds (QACs) which are used as disinfectants/sanitiser in the food industry. The industry has raised concerns that this may have implications for food hygiene and safety.

Background

1. Two types of QAC, didecyldimethylammonium chloride (DDAC) and benzalkonium chloride (BAC) are commonly used as disinfectants and sanitiser in food processing facilities because of their biocidal properties. These are also listed as Plant Protection Products and therefore fall within the scope of EC Regulation 396/2005¹, irrespective of their actual function in food processing.
2. Residues of QACs were previously detected in a broad range of foods, notably prepared fruit and vegetables, above the default MRL of 0.01 mg/kg set out in Regulation 396/2005. In the absence of a concern for health, a temporary guideline level for QACs of 0.5 mg/kg was agreed by the European Commission in 2012.
3. This guideline level has now been replaced by a new MRL of 0.1 mg/kg through Commission Regulation 1119/2014. The new MRL applies from 12 August 2015 to all food produced after that date and at any stage of the food supply chain. The Health and Safety Executive, as regulator for plant protection products, has written to the industry stakeholders to outline its regulatory approach, which will include enforcement of the new MRLs at all stages up to retail². In addition, the FSA have written to local authorities to draw their attention to industry concerns about potential food safety risks associated with the new MRLs.

¹ Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC, available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1442336915087&uri=CELEX:02005R0396-20150116>

² Available at <http://www.pesticides.gov.uk/Resources/CRD/Migrated-Resources/Documents/L/Letter%20to%20QAC%20Stakeholders%20re%20enforcement%20of%20MRLs%20-%20Aug%202015.pdf>

4. The food industry, particularly the chilled food sector, has indicated that concerns about non-compliance with the new QAC MRLs may drive food businesses towards the replacement of QAC-based disinfectants with other biocidal products. At this early stage it is not clear what alternative products to QACs are available and might be used and the possibility cannot be ruled out that similar problems of compliance will be found with other biocidal compounds.
5. The food industry has also warned that changes to disinfection and sanitisation practices in food processing facilities may lead to a compromise of microbiological food safety citing, for example, that rinsing food contact surfaces with potable water to remove biocidal residues could lead to an increased growth of *Listeria* spp. However, the industry has yet to provide firm evidence of such risks and therefore there is no data currently available to share with the Committee and therefore this note is only to draw your attention to a potential impact.

Secretariat
October 2015