

Executive Summary

This application is made on behalf of the New Zealand abalone industry, to include sodium hydrosulphite (also known as sodium dithionite) as a permitted food additive for use in canned abalone (paua) as set out in the Australia New Zealand Food Standards Code, standard 1.3.1, Schedule 1 section 9.4.

Sodium hydrosulphite is used during the processing of New Zealand canned abalone in solution with water to bleach the abalone. During processing (of canned abalone) sodium hydrosulphite undergoes exothermic chemical decomposition (reduction) and both sodium bisulphite and sodium thiosulphate are formed during this process. Each of these compounds undergoes further decomposition to form sulphur dioxide in the final canned product.

Work has been commissioned to determine the fate of sodium hydrosulphite during the processing (bleaching) of New Zealand abalone. This research, carried out by Massey University in New Zealand, confirmed that the sodium hydrosulphite is fully utilised in the preparation of abalone prior to canning and that there is no evidence of residual sodium hydrosulphite in the canned product.

Sulphur dioxide performs as an antioxidant in the final product and hence acting as a food additive. Sulphur dioxide is approved for use as stipulated in the Australia New Zealand Food Standards Code, standard 1.3.1, section 5 (2).

The inclusion of sodium hydrosulphite as a permitted additive will not increase the residual level of sulphur dioxide in canned abalone as this will remain within the permitted level of 1000 ppm. There is no request to amend the maximum permitted level of Sulphur dioxide.

Canned abalone is a delicacy consumed in relatively small amounts, predominantly by Asian customers around the world. These customers pay a premium price for this delicacy with exports from New Zealand representing approximately \$50 million in sales per annum.

In the international market, New Zealand competes with other abalone species (i.e. from other countries) that are naturally golden blonde to nutmeg in colour, this colour is the benchmark for abalone products. New Zealand abalone is the only species in the world where its natural colour is black. Therefore it is necessary to bleach the abalone with sulphites to provide a product of acceptable appearance (i.e. golden blonde to nutmeg colour).

Sodium hydrosulphite is the most efficient compound available to produce a finished product which has acceptable organoleptic properties. It is used as a food additive in other countries such as Canada, Japan and Korea.

This application has been developed in discussion with the Ministry for Primary Industries, who have been supplied a copy of the application, and it has been written in accordance with the Food Standards Australia New Zealand Application Handbook, 1 August 2011. Each section of the Application is headed up with the corresponding Handbook reference.