



## **Biopolymer International statement in response to the ethylene oxide contamination of xanthan gum (E 415)**

Biopolymer Int. is aware of the rapid alert notifications related to ethylene oxide found in imported xanthan gum (E 415)<sup>1</sup>. We take this issue very seriously as it might affect the reputation of the whole xanthan gum market.

We see compliance and safety as top priorities. All our members have thus confirmed that ethylene oxide is NOT used at any stage of their manufacturing process of xanthan gum.

Biopolymer Int. does not have any concrete elements or evidence to explain the origin of this contamination and at this point can only speculate on possible sources such as disinfection treatment in third countries infrastructures. However, most Biopolymer members are carrying out investigations into potential root causes of this contamination.

The Biopolymer Int. members have externalised the tests for their products. It seems that most laboratories use a GC-MS/MS methods, which either consist in measuring the sum of ethylene oxide and 2-chloroethanol with a limit of quantification (LOQ) of 0,01 mg/kg<sup>2</sup> or measuring ethylene oxide and 2-chloroethanol independently (both reporting parameters having LOQs of 0,01mg/kg) and also providing the sum of the individual parameters. Whereas the limits of quantification are results from accredited test laboratories, the members of Biopolymer would nevertheless like to stress that currently there is no validated methods for hydrocolloid matrices such as xanthan gum available. Consequently, the limits of quantification need to be treated with caution<sup>3</sup>.

Biopolymer Int. members are aware of the Commission and member states' intention to update Regulation 231/2012 laying down the specifications for food additives permitted in the EU<sup>4</sup> with limits for ethylene oxide in certain food additives. Biopolymer Int. would not be opposed to this update of the Regulation and is of the view that such limits should be based on science, especially since the actual origins of the contamination are not established with certainty. Further investigation in this area would be welcome.

Biopolymer International, November 2021

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<sup>1</sup> See <https://webgate.ec.europa.eu/rasff-window/screen/list>.

<sup>2</sup> According to information from one of our external laboratories used, the analytical error for the EtOx determination is 50 %.

<sup>3</sup> For example, systematic errors in the analytical method, when applied to the analysis of hydrocolloids, cannot be excluded *a priori*.

<sup>4</sup> See: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02012R0231-20210803>



Biopolymer International is an association of world-wide manufacturers of xanthan gum and gellan gum.

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