Call for technical and toxicological data on locust bean gum (E 410) as a food additive for uses in foods for all population groups including infants below 16 weeks of age

EFSA-Q-number: 2018-00561
Published: 18/07/2018
Deadline for registering interest: 26/09/2018
Deadline for submission of data: 31/12/2019
New deadline for submission of data: 31/07/2020

Background

According to Regulation (EC) No 1333/2008¹, food additives which were permitted for use in the European Union before 20 January 2009 need to be re-evaluated by the European Food Safety Authority (EFSA). The programme for this re-evaluation is defined by Regulation (EU) No 257/2010².

EFSA has issued a scientific opinion on the safety of locust bean gum (E 410) when used as food additive³ in food categories specified in Annexes II to Regulation (EC) No 1333/2008, exempting those for infants below 12 weeks of age. The reason was that the risk assessment approach followed until now by the EFSA Panel on Food Additives and Nutrient Sources added to Food (ANS Panel) in the re-evaluation of food additives does not apply to this age group⁴. The ANS Panel has, therefore, specified in its opinion that the re-evaluation of uses for this particular age group will be performed separately.

On 31 May 2017, EFSA’s Scientific Committee (SC) published a guidance document⁵ on the risk assessment of substances present in food intended for infants below 16 weeks of age, enabling the ANS Panel to assess the safe use of locust bean gum (E 410) and of other food additives for the population group below that age.

Following the latest advice from the EFSA’s Scientific Committee (SC) published guidance document⁵, the risk assessment to be performed will address the safety of uses of locust bean gum (E 410) in foods for infants below 16 weeks of age.


³ Re-evaluation of locust bean gum (E 410) as a food additive, EFSA ANS Panel, 2017.
https://doi.org/10.2903/j.efsa.2017.4646

⁴ Guidance for submission for food additive evaluations. EFSA ANS Panel, 2012.
https://doi.org/10.2903/j.efsa.2012.2760

https://doi.org/10.2903/j.efsa.2017.4849
In addition, the ANS Panel identified in the conclusions and recommendations of its published opinion on locust bean gum (E 410) data gaps in the risk assessment, relevant for all population groups.

For the sake of efficiency, the European Commission asked EFSA to address the above lack of data (data gaps) during its risk assessment of food additives for uses in food for young infants. Therefore specific data requirements for all uses of locust bean gum (E 410) are included in this call for data.

EFSA will consider the relevance of the information provided for the risk assessment of locust bean gum (E 410). The submission of the requested information is without prejudice to the final opinion of the Panel.

According to Article 6(5) of Regulation (EU) No 257/2010 where the requested information has not been submitted to EFSA within the set deadlines, the food additive may be removed from the Union list in accordance with the procedure laid down in Article 10.3 of Regulation (EC) No 1333/2008.

**Overall objective**

The purpose of this call for data is to offer interested parties (IPs) the opportunity to submit documented information (published, unpublished or newly generated) relevant to the re-evaluation of locust bean gum (E 410) to be used in foods for infants below 16 weeks of age, as well as to address the data gaps that have been identified for all population groups in the already published EFSA opinion on this food additive.

**Deadlines for submission of data and disclosure of contact details**

Interested parties and stakeholders should provide earlier or at the latest by 31/07/2020 the information described below.

Within **10 weeks** from the publication of this call, please communicate in writing by e-mail to: fip@efsa.europa.eu, your availability to submit the requested information by the timeline specified above or any proposal for a new deadline providing justified reasons. Depending on the replies received the final deadline will be communicated to you through e-mail and by updating the current call.

In accordance with Article 6(4) of the Regulation (EU) No 257/2010 the information not submitted within the final deadline will only exceptionally be considered and EFSA can finalise its opinions on the basis of the information already provided.

In order to facilitate the collaboration of all interested parties to provide the data needed, we are seeking your consent to disclose your personal data (name, e-mail address and telephone number) to the other parties that has expressed an interest to provide the requested information. If you do not wish to make your contact details available, clearly indicate it in your first communication.

**Information sought**

EFSA invites business operators and other interested parties (governments, interested organisations, universities, research institutions, companies) to submit technical and toxicological data on locust bean gum (E 410), as appropriate. This information will be used

- for the follow-up on data gaps identified in the conclusions and recommendations of the Scientific Opinion on the re-evaluation of locust bean gum (E 410) as a food additive by the EFSA ANS Panel (EFSA Panel on Food Additives and Nutrient Sources added to Food) published in 2017.

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• for the risk assessment of locust bean gum (E 410) as food additive used in foods for infants below 16 weeks of age in the food category 13.1.5.1. It should be in line with the EFSA Guidance of the Scientific Committee on the risk assessment of substances present in food intended for infants below 16 weeks of age.

A. Information regarding the follow up of the conclusions and the recommendations of the EFSA ANS Panel opinion on the safety of locust bean gum (E 410) as food additive

With reference to the conclusions and recommendations in the Scientific Opinion on the re-evaluation of locust bean gum (E 410) as a food additive by the EFSA ANS Panel published in 2017 information for locust bean gum (E 410) is sought on:

1. Technical data
   • analytical data on current levels of lead, mercury, cadmium and arsenic in commercial samples of the food additive;
   • the lowest technologically achievable level for lead, mercury, cadmium, and arsenic in order to adequately define their maximum limits in the specifications;
   • current levels of residual proteins in clarified and unclarified preparations;
   • the possibility to use clarified locust bean gum to cover all technological needs of the food additive E 410;
   • the lowest technologically achievable level for residual proteins in clarified and unclarified preparations in order to adequately define their maximum limits in the specifications in view of case reports on hypersensitivity reactions associated with locust bean gum.

In addition, a proposal for separate specifications for clarified and unclarified locust bean gum is requested.

The information should be supported by data from at least five different batches and the analyses should be performed with appropriate analytical methods. EFSA seeks specific data on the methods of analysis used. These include but are not limited to e.g. the principle of the method, the scope of the method (i.e. the range of sample types that the method is used for), the concentration units used to express the analytical result(s), validation of the method (in particular limit of detection (LOD) and (LOQ).

Such methods should employ state of the art techniques.

• Because of both the botanical origin and the polysaccharidic nature of locust bean gum, it can be a substrate of microbiological contamination. Data should be provided demonstrating the absence of Salmonella spp. and Escherichia coli and on the lowest total aerobic microbial count (TAMC) and total combined yeast and mould count (TYMC) that can be reached.

2. Toxicological data

According to the conclusions and recommendations in the Scientific opinion on the re-evaluation of locust bean gum (E 410) as a food additive by the EFSA ANS Panel (EFSA Panel on Food Additives and Nutrient Sources added to Food) published in 2017, the generation of additional data to assess the potential health effects of locust bean gum (E 410) when used as a food additive in ‘dietary foods for infants for special medical purposes and special formulae for infants’ (Food category 13.1.5.1) and in ‘dietary foods for babies and young children for special medical purposes as defined in Directive 1999/21/EC’ (Food category 13.1.5.2) was recommended. These requirements could be addressed as outlined in section B. 2.
3. Literature searches

Literature searches should be conducted relevant for the safety evaluation of locust bean gum (E 410) for all uses in foods for all population groups from 12/10/2016\(^6\) up to the date of the data submission, as described in the Guidance for submission for food additive evaluations (see its section 5.3)\(^4\).

B. Information required for the risk assessment of locust bean gum (E 410) as food additive for use in foods for infants below 16 weeks of age

For the uses of locust bean gum (E 410) as a food additive in foods for infants below 16 weeks EFSA seeks

1. Technical data

- information on the usage levels of locust bean gum (E 410), alone or in combination with other thickening agents (indication of food additive name and level of use) in the special formulae for infants below 16 weeks of age under special medical conditions (FC 13.1.5.1),
- information on the fate and the reaction products of locust bean gum (E 410) in special formulae for infants below 16 weeks of age under special medical conditions (FC 13.1.5.1),
- information on particular specification requirements for identity and the purity of locust bean gum (E 410) (e.g. with respect to levels of protein residues; use of clarified locust bean gum; content of toxic elements, propan-2-ol/ethanol) for special formulae for infants below 16 weeks of age under special medical conditions. Analytical data on impurities in the final special formulae for infants below 16 weeks of age need to be provided when no legal limit has been established.

In addition, data should be provided demonstrating the absence of Cronobacter (Enterobacter) sakazakii in the food additive.

2. Toxicological data

Within the frame of the EFSA Guidance of the Scientific Committee on the risk assessment of substances present in food intended for infants below 16 weeks of age\(^5\) the following information on the toxicological properties of locust bean gum (E 410) and its adverse effects, relevant for evaluating the safety of its use as a food additive in foods for special medical purposes (FSMP) for infants below 16 weeks is required. This information is relevant for the risk assessment of the use of locust bean gum (E 410) as a food additive in FSMP for older infants and young children considering that the studies are of appropriate duration (see part A.2.):

- a repeated dose study with direct oral administration of locust bean gum (E 410) to neonatal animals which includes gross and histopathological examination of the gastrointestinal tract, influence on the microbiota and a possible modification of the bioavailability of nutrients (vitamins and minerals, such as calcium, iron and zinc), that are normally contained in food for infants. The study shall be performed in piglets unless justification for the relevance of a study in another species is given;
- clinical data focusing on gastrointestinal effects to assess the safety of locust bean gum (E 410) when used in dietary foods for special medical purposes in infants below 16 weeks of age (FC 13.1.5.1);

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\(^{6}\) date of last literature search reported in the EFSA ANS opinion
• post-marketing surveillance reports on undesired and adverse reactions (including e.g. flatulences, gastrointestinal discomfort, changes of stool-frequencies and -consistency, diarrhoea and allergic reactions), indicating the ages and other relevant data of the exposed infants and young children and the use level of locust bean gum (E 410) in the marketed products;

• published and unpublished case reports (e.g. available nutrivismilage data) on undesired and adverse effects, including e.g. flatulences, gastrointestinal discomfort, changes of stool-frequencies and -consistency, diarrhoea and allergic reactions, associated with the oral administration of locust bean gum in any form to infants and young children.

3. Literature searches

Literature searches should be conducted relevant for the safety evaluation locust bean gum (E 410) when used in foods for infants below 16 weeks of age up to the date of the data submission, as described in the Guidance for submission for food additive evaluations (section 5.3) ¹.

Confidentiality

According to article 8 of Regulation (EU) No 257/2010 setting up a re-evaluation programme of approved food additives, confidential treatment may be given to information the disclosure of which might significantly harm the competitive position of business operators or other interested parties.

Therefore, the business operators and/or the interested parties should indicate which information wish to be treated as confidential and provide verifiable justification supporting this request. Note that the information described in article 8(2) of the Regulation (EU) No 257/2010 cannot be confidential.

In application of Article 8(4) of Regulation (EU) 257/2010, following a proposal from EFSA, the Commission will decide after consulting the interested business operator and/or the other interested parties, which information may remain confidential.

Submission of information

Interested business operators and/or interested parties should submit the information to EFSA in electronic form (e.g. CD-rom, DVD, etc.) with a

• cover letter that should contain:
  
  o Reference to the specific call and the specific EFSA question number indicated (EFSA-Q-2018-00561);
  
  o Reference to the substance concerned and its E number;
  
  o The contact details (name of contact person, name of company/organisation, e-mail address and telephone number) of the person responsible for the data submission and, if applicable, the list of interested business operators and/or interested parties represented and their contact details;

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¹ The interested parties shall notify EFSA of any change in the contact details by sending an e-mail to the FIP mailbox (fip@efsa.europa.eu).
statement of the submitter that they hold all the necessary rights to grant EFSA permission to use and, where appropriate, to disclose the submitted information, data, document, paper or study for the purposes better defined in this call. In case the submitter does not enjoy the necessary rights for these data or studies, they should share the contact details of the respective owner(s) of data and/or of the relevant intellectual property right, so that EFSA may seek their approval directly.

- separate folders with the confidential and with the non-confidential parts.

**Possibility for EFSA to use the data for the safety assessment of the same or other substance under the same or other legal or regulatory frameworks.**

In case future mutual interests arise in exchanging any relevant information (i.e. technical or toxicological data) with the Joint WHO – FAO Expert Committee on Food Additives (JECFA) for the re-evaluation of food additives, we would appreciate your written consent for data sharing between EFSA and JECFA on this additive.

Note that EFSA may use or re-use relevant information or data (i.e. technical, toxicological data) for the evaluation of the same or another substance under the same or a different legal or regulatory framework from the one mentioned above.

**Correspondence**

Please send all electronic correspondence, including enquiries to: [fip@efsa.europa.eu](mailto:fip@efsa.europa.eu)

**Submissions should be sent to the following address:**

European Food Safety Authority

FIP Unit

Via Carlo Magno 1/a

I-43126 Parma

Italy
## Annex I

**Naming convention to be used for submission of information**

Please create a folder with subfolders for each section applicable, as indicated below, and name files using the E number_section identification numbers_study name abbreviation of your choice, and indicating which parts are to be considered confidential:

<table>
<thead>
<tr>
<th>Section 1. Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 2. Biological and Toxicological data</td>
</tr>
<tr>
<td>Section 3. Literature searches</td>
</tr>
</tbody>
</table>