Date: 4/21/2007
Subject: Gellan Gum for addition to National List under §205.605B, synthetics.
Chair: Andrea Caroe

Recommendation

The NOSB hereby recommends to the NOP the following:
  Rulemaking Action: XXX
  Guidance Statement: 
  Other: 

Statement of the Recommendation (including Recount of Vote):
The Board recommends NOT adding Gellan Gum, to the National List under §205.605b, synthetics allowed.

NOSB Vote: Motion: Julie Weisman Second: Steve DeMuri

Board vote: Yes -6 No-4 Abstain-1 Absent-4 Recuse-0

Rationale Supporting Recommendation (including consistency with OFPA and NOP):
The National List of Allowed and Prohibited Substances §205.605b

Response by the NOP:
National Organic Standards Board

Final Recommendation for

Date: April 21, 2007

I. List:

National Organic Program Subpart G: The National List of Allowed and Prohibited Substances, §205.605a Nonagricultural (nonorganic) substances allowed as ingredients in or on processed products labeled as “organic” or “made with organic (specified ingredients or food groups(s)).”

(b) Synthetics allowed

II. Committee Summary:

The petitioner for Gellan Gum made the case that Gellan Gum presents unique qualities as compared to the other gums currently on the National Organic list and gave a few examples of the attributes that Gellan Gum provides in comparison to other materials on the National List that are also used as thickeners. The petitioner mentioned that Gellan gum provides many characteristics, some of which are better than and some that are similar to the currently listed gums (either non-synthetic or synthetic).

Although the petitioner mentioned the benefits of this gum to be similar to those gums already approved and listed on the National Organic list, there was significant confusion when discussion at the April 2007 NOSB meeting regarding the possibility of one of the currently listed National List items being used as a substitute for Gellan Gum might be considered.

In the TAP report it is noted that “similar substances listed as non-synthetic non-agricultural (non-organic) substances allowed as ingredients in or on processed products (7 CFR § 205.605a)) including agar-agar and carrageenan. Synthetic substances allowed for the same purposes (7 CFR § 205.605 b)) include alginates, pectin (low-methoxy), and xanthan gum. Like gellan gum, carrageenen, pectin, alginate, and agar-agar are all gelling agents (Wanous, 2004).

...Determining which gum to use in an application greatly depends on the type of functionality needed and the applications processing parameters.” Because of these comments in the TAP and the petition the NOSB sought further informant and clarification.

During the NOSB meeting Cheryl Van Dyne from CP Kelco Company approached the Chair as representative for the petitioner to try to answer the questions regarding appropriate use and functionality of Gellan Gum in comparison to currently listed thickeners. The following dialog was taken directly from the NOSB April 2007 meeting and discloses some of the ambiguity that the Board was having regarding Gellan Gum.

“Cheryl Vandine, CP Company, petitioner for gellan gum, 205.605B. Could you ask the specific question so that I can answer you?
MS. JAMES: Could you tell me the type of products that you’re -- and the consistency that you’re looking for specifically with the gellan gum?
MS. VANDINE: Okay. We've been working with various beverage formulators and actually White Wave presented comments about the stability that gellan gum provides in beverages and it's not present with similar but not the same type of additives. It provides the ability to stabilize the nutrients and minerals in certain beverages like soy beverages or milk beverages.

MS. JAMES: Are you currently making products without it that are okay?

MS. VANDINE: No, not organic but, they are in the like the chocolate milks and soy milks that are not organic at this time. Their organic industry asked us to move towards this petition, put this petition forth, for beverages at one point, but, gellan gum has some neat functionalities as xanthin gum wouldn't have. It doesn't require protein to suspend. It has its own matrix so it has a better suspense system ending property set than some of the other gums. We currently make xanthin and I can speak for that.

MS. JAMES: Okay. Thank you.

MR. GIACOMINI: Okay. Wait, wait, wait. I have a question. The TAP review identifies as a fermentation product which would normally be non-synthetic. You specifically requested listed on B which synthetic. Do you have justification for doing that?

MS. VANDINE: Well, at the time xanthin gum is on the 605B and we put it in the same place as xanthin. Xanthin is also fermentation derived.

MS. CAROE: If the information from the TAP reviewer can be pulled up the TAP reviewer should clarify appropriate listing.

-Rescinded. Board needed time to research TAP. Resumed-

MS. HEINZE: I have the TAP for gellan gum on my computer. I just need a reminder of what I was looking for.

MS. MIEDERMA: Question.

MS. CAROE: Tracy?

MS. MIEDERMA: It seems that the question was around what consistency properties were imparted by this substance, ingredient.

MS. CAROE: I believe we had the petitioner up and answered that question.

MS. MIEDERMA: Yeah, and it didn't seem to satisfy the group at that moment.

MS. CAROE: Jennifer?

MS. HALL: The reason that we tabled it was to clarify why she applied under the category she did and she wasn't quite clear. She basically said she did so because the other product they produced with similar properties fell under that category currently.

MS. CAROE: Right. And as I remember we were going to look at the TAP to see what the TAP contract said. Katerina?

MS. HEINZE: Evaluation question number one on the TAP, the question is, has the petitioner in some sense formulated or manufactured by a chemical process. The second paragraph they say it's produced by naturally occurring biological process and a chemical process is used to extract the gellan gum from the gelatation medium and to formulate the desired thickness of the gum. Then further down in evaluation question number 2 it says the formulation and manufacturing process involves partial removal of aceto groups which in turn affects the thickness and hardness of the gel. I do remember now in sub-committee we had discussion about that which caused us to concur that it should be on 205B -- 205.605B.

MS. CAROE: Julie?

MS. WEISMAN: I also, in looking at the references to the TAP under evaluation criteria, I also see that the extraction solvent is isopropyl alcohol which is a synthetic which is further weight that this should be 205.605B.”

Discussion regarding the extraction solvent, isopropyl alcohol, also created confusion among the board. In the appendices the petitioner cited US FDA, 21 CFI 172.665 Gellan Gum dated April 2 2004 which states: “The food additive gellan gum may be safely used in food in accordance with the following prescribed conditions: (a) The additive is a high molecular weight polysaccharide
gum produced from Pseudomonas elodea by a pure culture fermentation process and purified by recovery with isopropyl alcohol...."

The Handling Committee also considered what constitutes “essential” for organic handling of a finished retail product and how that may be different from that of a material used in crop or livestock production. It was agreed that certain materials might be essential for creating a product that meets consumer expectations of taste or texture. A number of commenters cited Gellan Gum would greatly enhance the organic consumer products they make for this reason. There were no public comments specifically opposing the listing of Gellan Gum on § 205.605b.

Because there were conflicting statements regarding Gellan Gums use and functionality and because of the use of isopropyl alcohol in Gellan Gum the Board was indecisive in understanding the complete form and function of Gellan Gum and it failed for inclusion on 205.605b.

**III. Board Recommendation**

Gellan Gum fails for inclusion on §205.605b and will not be added to the National List of allowed and prohibited substances.

*Moved: Julie Weisman    Second: Steve DeMuri*

*Board vote: Yes- 6    No- 4    Absent- 4    Abstain-1    Recuse-0*