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Via Electronic Transmission

Ms. Michelle Arsenault
Special Assistant
National Organic Standards Board
1400 Independence Ave. SW, Room 2648
Washington, DC 20250-0268

April 5, 2021

Re: Agricultural Marketing Service Docket Number AMS-NOP-20-0089: Meeting of the National Organic Standards Board, 86 Fed. Reg. 10161 (February 18, 2021)

Dear Ms. Arsenault:

On behalf of the American Spice Trade Association (ASTA), we appreciate the opportunity to submit comments in response to the Agricultural Marketing Service's (AMS) upcoming National Organic Standards Board (NOSB) meeting from April 28-30, 2021, held online, on the proposed Handling Subcommittee's recommendations to the NOSB. ASTA is submitting comments and information to support the continued listing of silicon dioxide on the National List of Allowed and Prohibited Substances (National List) and providing additional information to answer the NOSB Handling Subcommittee's questions.

ASTA was founded in 1907 and represents the interests of approximately 200 members, including companies that grow, dehydrate, and process spices. ASTA's members include U.S. based agents, brokers and importers, companies based outside of the U.S. that grow spices and ship them to the U.S., and other companies associated with the U.S. spice industry. ASTA members manufacture and market the majority of spices sold in the U.S. for industrial, food service and consumer use. The highest priority of ASTA and our members is ensuring the supply of pure, safe spice to American consumers.

ASTA Supports Silicon Dioxide Remaining on the National List

ASTA is submitting comments in support of silicon dioxide remaining on the National List. The current annotation reads:

> §205.605(b) Silicon dioxide - Permitted as a defoamer. Allowed for other uses when organic rice hulls are not commercially available.

NOSB is requesting that stakeholders provide information on the following:

- if there is a reliable, consistent commercial availability of rice hulls for the applications in which it performs well,
- whether there are organic alternatives to silicon dioxide that are more suitable when rice hulls are not viable, and
- how prevalent the use of silicon dioxide is for other allowed purposes, e.g. anticaking agent, flow agent, flavor disbursement.

Silicon dioxide is used for anticaking in spices and seasoning blends and can only be used in organic products if the quality, quantity, or form of organic rice hulls is not commercially available.[1] In the 2010 petition to remove silicon dioxide, the petitioner claimed that a form of rice hulls would become available that could substitute silicon dioxide in a 1:1 ratio. The 2011 NOSB Handling Committee was "concerned that applicable alternatives do not exist for sufficient uses and applications of silicon dioxide in organic handling". So, the Committee determined that silicon dioxide would remain on the National List to accommodate organic manufacturers if an applicable form of rice hulls is not commercially available.

In the previous sunset review in 2016, public comment indicated that commercially available organic rice hulls are not a viable alternative to silicon dioxide in some applications. Organic rice hulls are problematic as an anticaking agent in powders, and spice and seasoning blends. In these applications, rice hulls absorb excess moisture and clump. Also, in order to achieve the technical effect, rice hulls must be used at a rate of 15-50% compared to 2% silicon dioxide to achieve the same effect. The low percentage of silicon dioxide needed to prevent clumping is a very desirable quality in an anticaking and flow agent. These reasons continue to remain relevant today as rice hulls that can serve as an alternative to silicon dioxide are not commercially available.

Rice Hulls Are Not A Consistent Alternative for Silicon Dioxide for Organic Spice and Seasoning Blends

Organic rice hulls cannot be consistently used in spice and seasoning blends for anticaking or to help with flow disbursement. Technical challenges include clumping and inability to provide anticaking at a usable ratio. They can also affect the spice or seasoning blend negatively in relation to the color or the consistency of the blend. When organic rice hulls are used effectively, they must be used at the 15-50% ratio. At this ratio, the rice hulls may be able to prevent clumping or anticaking, but the addition of this amount of rice hulls renders the quality of the spice blend unsuitable.

There Are No Viable Alternatives to Silicon Dioxide

There are currently no organic alternatives that can be used for spice or seasoning blends if silicon dioxide is removed from the National List. If spice companies have to forego using silicon dioxide, the closest alternative that works in a similar fashion is tricalcium phosphate, which is also on the National List for use in organic production, and also not available in an organic form.

[1] 7CFR §205.2. Commercially available. The ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan

Silicon Dioxide is Needed for Certain Spice and Seasoning Blends, Especially with Powdery and Hygroscopic Ingredients

Silicon dioxide as an anticaking agent is most needed in seasoning and spice blends containing powdery and hygroscopic ingredients. For example, blends that include vegetable (e.g., garlic, onion, bell pepper) and fruit powders (e.g., tomato, elderberry, etc.) contain large percentages of natural sugars that make clumping likely. Additionally, seasonings with higher proportions of powdery ingredients (e.g., finely ground salts, vinegar powders, etc.) and hygroscopic ingredients and/or sweeteners (e.g., sugar, honey powder, etc.) tend to clump and render the product unusable after a period of time (depending on humidity and storage conditions). Clumping is particularly problematic when the product is moved through or into different climates and humidity levels, including in storage.

Also, blends that use essential oils, oleoresins, liquid flavors, and neutral oils (utilized to keep blends homogenized, as a processing aid), often require some silicon dioxide to offset the moisture that has been added into the seasoning with the oil/liquid.

Conclusion

In conclusion, ASTA supports silicon dioxide remaining on the National List for use when organic rice hulls are not commercially available. Silicon dioxide continues to be an important tool for organic spice and seasoning blends to prevent clumping and to improve product flow. Finally, there are no organic alternatives available that can be consistently used in spice or seasoning blends without affecting the quality, quantity or form of the product.

Please feel free to reach out to me with any questions or follow-up you may have.

Sincerely,

Laura Shumow
ASTA Executive Director