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July 15, 2022

National Organic Standards Board
Agricultural Marketing Service
Room 2510 – So, Ag Stop 0268
PO Box 96456
Washington, D.C. 20090-6456

Dear Ms. Holm:

Thank you for your June 22, 2022 response to Kemin Food Technologies' petition requesting additional information that is needed in support of the petition.

In that response you asked three questions. Responses to your questions are provided below:

1. The process flow detailed in your response is mostly correct. However, one minor change to Section 1(c) is that the carrier is unlikely to be an oil. After extraction, the plant extract could be used without a carrier, or could be used with a water-soluble carrier including but not limited to water or organic ethanol. It is also possible for the *lamiaceae* plant extracts to be combined with a dry carrier, including but not limited to something like organic rice flour, and then added as a dry ingredient to the finished food.
2. Finished products incorporating this extract would be any multi-ingredient product certified as organic under USDA NOP federal regulatory program.
   Lipid oxidation, a chain reaction that occurs in the presence of oxygen and lipid molecules, is responsible for deterioration in food quality and can lead to possible off-flavors or off-odors. Oxidation can be affected by processing, packaging, storage methods, or even ingredients within a food product. Fortunately though, antioxidants are common food ingredients today used to help prevent oxidant and thereby preserve freshness to help ensure consumers have the most appealing and fresh food. Multiple synthetic antioxidants have commonly been used throughout history, but data has shown similar effects can come from the power of plants. These plant-based antioxidants are acceptable to consumers. Consumers not only expect a product to taste fresh through its shelf life, but also demand use of ingredients they feel good about, including those that are plant-based and organic compliant. Consumers have a wide range of expectations, meaning food ingredient manufacturers must offer a wide range of product solutions, including the antioxidants or other target molecules mentioned in this petition.
3. The intent behind his petition was not to support production of organic rosemary extract. The current need is for an extraction solvent to process spearmint. However, as many plants from the *lamiaceae* family contain additional beneficial molecules that might not have been discovered yet, the need to extract these new molecules may arise in the future. That being said, Kemin is not currently aware of any such additional molecule having been affirmed GRAS for its intended use, and therefore a GRAS affirmation would be required before any additional plant extract could be applied to an organically certified food. Thus, while Kemin believes phosphoric acid could be used to aid in the extraction of any target molecule from the lamiaceae family, the current request could be limited to extraction of only antioxidants from spearmint if such amendment was more acceptable to the NOSB Handling Subcommittee.

Respectfully submitted,

Tim Alberts
Principal Regulatory Affairs Manager
Kemin Food Technologies