

NOSB COMMITTEE RECOMMENDATION

Form NOPLIST1. Committee Transmittal to NOSB

For NOSB Meeting: Spring 2008

Substance: Pectin, low-methoxy, non-amidated

Committee: Crops Livestock Handling Petition is for: inclusion on the National List § 205.606 (e)

A. Evaluation Criteria (Applicability noted for each category; Documentation attached)	Criteria Satisfied? (see B below)
1. Impact on Humans and Environment	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
2. Essential & Availability Criteria	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
3. Compatibility & Consistency	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
4. Commercial Supply is Fragile or Potentially Unavailable as Organic (only for 606)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

B. Substance Fails Criteria Category: _____ **Comments:** _____

C. Proposed Annotation (if any): _____

Basis for annotation: To meet criteria above: _____ Other regulatory criteria: _____ Citation: _____

D. Recommended Committee Action & Vote (State Actual Motion): Move that Pectin, low-methoxy, non-amidated be added to § 205.606 (e) of the National List

Motion by: Katrina Heinze Seconded: Joe Smillie Yes: 5 No: 0 Absent: 1 Abstain: 0

1) Substance as "allowed" on 205.606 (e) any)

Crops		Agricultural		Allowed ¹	X
Livestock		Non-Synthetic		Prohibited ²	
Handling	X	Synthetic		Rejected ³	
No restriction		Commercially Un-Available as Organic ¹	X	Deferred ⁴	

voted to be added National List to § with Annotation (if

2) Substance to be added as "prohibited" on National List to § 205. _____ with Annotation (if any) _____

Describe why a prohibited substance: _____

3) Substance was rejected by vote for amending National List to § 205. _____ Describe why material was rejected: _____

4) Substance was recommended to be deferred because _____

_____ If follow-up needed, who will follow up _____

5) Further Action: It is the hope of the handling committee that a petition will be made in the near future for the annotation of Pectin on to § 205.605b to specify "low-methoxy, amidated, only."

E. Approved by Committee Chair to transmit to NOSB:

Julie Weisman
Committee Chair

3/25/2008
Date

NOSB EVALUATION CRITERIA FOR SUBSTANCES ADDED TO THE NATIONAL LIST

Category 1. Adverse impacts on humans or the environment? Substance – Pectin, low-methoxy, non-amidated

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Are there adverse effects on environment from manufacture, use, or disposal? [§205.600 b.2]		XX		Petition page 1, section 5 describes the manufacture of low-methoxy, non-amidated pectin from apple pumice, a by-product of apple juice production (pressing). If anything the environment benefits from the use of what would otherwise be a waste stream of apple juice pressing. It should be noted that this material is included in “ Pectin, low-methoxy” which is currently approved for use in organic handling and is included on § 205.605b.
2. Is there environmental contamination during manufacture, use, misuse, or disposal? [§6518 m.3]		XX		
3. Is the substance harmful to the environment? [§6517c(1)(A)(i);6517(c)(2)(A)i]		XX		
4. Does the substance contain List 1, 2, or 3 inerts? [§6517 c (1)(B)(ii); 205.601(m)2]		XX		
5. Is there potential for detrimental chemical interaction with other materials used? [§6518 m.1]		XX		
6. Are there adverse biological and chemical interactions in agro-ecosystem? [§6518 m.5]		XX		This material is used as an ingredient in a finished food product. It is no longer in the agro-ecosystem,
7. Are there detrimental physiological effects on soil organisms, crops, or livestock? [§6518 m.5]		XX		This material is used as an ingredient in a finished food product. It is no longer in the agro-ecosystem
8. Is there a toxic or other adverse action of the material or its breakdown products? [§6518 m.2]		XX		This material is used as an ingredient in a finished food product. It is no longer in the agro-ecosystem
9. Is there undesirable persistence or concentration of the material or breakdown products in environment?[§6518 m.2]		XX		This material is used as an ingredient in a finished food product. It is no longer in the agro-ecosystem
10. Is there any harmful effect on human health? [§6517 c (1)(A)(i) ; 6517 c(2)(A)i; §6518 m.4]		XX		
11. Is there an adverse effect on human health as defined by applicable Federal regulations? [205.600 b.3]		XX		
12. Is the substance GRAS when used according to FDA’s good manufacturing practices? [§205.600 b.5]	XX			Petition p. 2 section 7 describes that Pectin is considered GRAS by the FDA 21 CFR § 184.158
13. Does the substance contain residues of heavy metals or other contaminants in excess of FDA		XX		

tolerances? [§205.600 b.5]				
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¹If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 2. Is the Substance Essential for Organic Production? Substance – Pectin, low-methoxy, non-amidated

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance formulated or manufactured by a chemical process? [6502 (21)]		X		Petition p. 1, section 5 describes that the pectin present in the cell wall structure of the apple pumice “is extracted with acidified water and that filtered or strained to remove any remaining insoluble materials.” Extraction and filtration are allowed processes.
2. Is the substance formulated or manufactured by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral, sources? [6502 (21)]		X		According to the petition, pectin is present in the cell wall structure of the apple pumice.
3. Is the substance created by naturally occurring biological processes? [6502 (21)]		XX		It is produced by the plant, in this case, apples.
4. Is there a natural source of the substance? [§205.600 b.1]	XX			This is material is from a natural source--apples.
5. Is there an organic substitute? [§205.600 b.1]		XX		
6. Is the substance essential for handling of organically produced agricultural products? [§205.600 b.6]	XX			Petition p.1 section describes the use of pectin as providing structure (thickness) to fruit spreads and fruit preparations. They are essential for the making of jams and jellies and other products.
7. Is there a wholly natural substitute product? [§6517 c (1)(A)(ii)]			XX	This is an agricultural products and wholly natural.
8. Is the substance used in handling, not synthetic, but not organically produced? [§6517 c (1)(B)(iii)]	XX			It should be noted that this material is included in “ Pectin, low-methoxy” which is currently approved for use in organic handling and is included on § 205.605b. The petitioner wishes to have the “non-amidated” form of low-methoxy pectin recognized as non-synthetic and agricultural and more appropriately placed on § 205.606 either individually or included in the current listing on that section which now includes high-methoxy pectin.
9. Is there any alternative substances? [§6518 m.6]	XX			High-methoxy pectin is currently listed on § 205.606 but does not function adequately in many products.
10. Is there another practice that would make the substance unnecessary? [§6518 m.6]		XX		

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Category 3. Is the substance compatible with organic production practices?

Substance – Pectin, low-methoxy, non-amidated

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance compatible with organic handling? [§205.600 b.2]	XX			It should be noted that this material is included in “ Pectin, low-methoxy” which is currently approved for use in organic handling and is included on § 205.605b. The petitioner wishes to have the “non-amidated” form of low-methoxy pectin recognized as non-synthetic and agricultural and more appropriately placed on § 205.606 either individually or included in the current listing on that section which now includes high-methoxy pectin.
2. Is the substance consistent with organic farming and handling? [§6517 c (1)(A)(iii); 6517 c (2)(A)(ii)]	XX			It should be noted that this material is included in “ Pectin, low-methoxy” which is currently approved for use in organic handling and is included on § 205.605b. The petitioner wishes to have the “non-amidated” form of low-methoxy pectin recognized as non-synthetic and agricultural and more appropriately placed on § 205.606 either individually or included in the current listing on that section which now includes high-methoxy pectin.
3. Is the substance compatible with a system of sustainable agriculture? [§6518 m.7]	XX			It should be noted that this material is included in “ Pectin, low-methoxy” which is currently approved for use in organic handling and is included on § 205.605b. The petitioner wishes to have the “non-amidated” form of low-methoxy pectin recognized as non-synthetic and agricultural and more appropriately placed on § 205.606 either individually or included the current listing on that section which now includes high-methoxy pectin. In addition, there are environmental benefits from the use of what would otherwise be a waste stream of apple juice pressing.
4. Is the nutritional quality of the food maintained with the substance? [§205.600 b.3]	XX			
5. Is the primary use as a preservative? [§205.600 b.4]		XX		
6. Is the primary use to recreate or improve flavors, colors, textures, or nutritive values lost in processing (except when required by law, e.g., vitamin D in milk)? [205.600 b.4]		XX		Although, the primary use of this material is to affect texture, it does not recreate or improve texture lost in processing. It creates texture that did not previously exist.
7. Is the substance used in production, and does it contain an active synthetic ingredient in the following categories:			XX	This material is used as an ingredient in a finished food product.
a. copper and sulfur compounds;			XX	This material is used as an ingredient in a finished food product.
b. toxins derived from bacteria;			XX	This material is used as an ingredient in a finished food product.
c. pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals?			XX	This material is used as an ingredient in a finished food product.
d. livestock parasiticides and medicines?			XX	This material is used as an ingredient in a finished food product.
e. production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleaners?			XX	This material is used as an ingredient in a finished food product.

¹If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 4. Is the commercial supply of an agricultural substance as organic, fragile or potentially unavailable? [§6610, 6518, 6519, 205.2, 205.105 (d), 205.600 (c) 205.2, 205.105 (d), 205.600 (c)]

Substance - Pectin, low-methoxy, non-amidated

Question	Yes	No	N/A	Comments on Information Provided (sufficient, plausible, reasonable, thorough, complete, unknown)
1. <u>Is the comparative description provided</u> as to why the non-organic form of the material /substance is necessary for use in organic handling?	XX			Petition p.1 section describes the use of pectin as providing structure (thickness) to fruit spreads and fruit preparations. They are essential for the making of jams and jellies and other products. Pectin, which occurs naturally in the cell wall structure of much plant material, has been used for centuries in preserving fresh fruit for year-round consumption is, in fact, essential to this endeavor. Its current listing as a synthetic material precludes it's being eligible for organic certification. Listing this form of pectin on § 205.606 would make it eligible for organic certification, should a processor decide to develop a commercial supply of this material in organic form.
2. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate form to fulfill an essential function in a system of organic handling?		XX		It is not available in organic form AT ALL as yet. See comment in #1 above.
3. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate quality to fulfill an essential function in a system of organic handling?			XX	It is not available in organic form in ANY quality as yet. See comment in #1 above.
4. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate quantity to fulfill an essential function in a system of organic handling?			XX	It is not available in organic form in ANY quantity as yet. See comment in #1 above.
5. Does the industry information provided on material / substance non-availability as organic, include (but not limited to) the following: a. Regions of production (including factors such as climate and number of regions);				Petitioner does not indicate that any of the factors in section 5 are an obstacle to the availability of this material in an organic form.
b. Number of suppliers and amount produced;				See above
c. Current and historical supplies related to weather events such as hurricanes, floods, and droughts that may temporarily halt production or destroy crops or supplies;				See above
d. Trade-related issues such as evidence of hoarding, war, trade barriers, or civil unrest that may				See above

temporarily restrict supplies; or				
e. Are there other issues which may present a challenge to a consistent supply?				See above.