

**FLAVORCHEM INT. INC. – NAQADA PACIFIC  
PETITION TO USDA INCLUSION OF  
MAGNESIUM CARBONATE  
IN NOP NATIONAL LIST**

**DATE SUBMITTED:**

Submitted in duplicate to:

**National Organic Standards Board,**  
c/o Robert Pooler, Agricultural Marketing Specialist,  
USDA/AMS/TM/NOP, Room 2510-Sol., Ag Stop 0268, P.O. Box 96456,  
Washington, D.C. 20090-6456.  
Phone: 202/720-3252. Fax: 202/205-7808.  
e-mail: [nlpetition@usda.gov](mailto:nlpetition@usda.gov).

What Are the Substances for Which a Petition May be Submitted?

Only single substances or ingredients may be petitioned for evaluation. Formulated products cannot appear on the National List. Substances that appear on USDA's current Proposed National List, 65 Fed. Reg.13626-13628 (2000), should not be petitioned for inclusion on the National List.

ALL GUIDING DOCUMENTS AVAILABLE AT:

[HTTP://WWW.AMS.USDA.GOV/NOP/PETITION/PETITIONHOME.HTML](http://www.ams.usda.gov/nop/petition/petitionhome.html)

|   |  |   |
|---|--|---|
| 1 | Petition Category  | Nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as "organic" or made with organic (specified ingredients). |
| 2 | Substance common name:   | Magnesium Carbonate   |
| 3 | Manufacturer's name, address and telephone number:   | Ichiman<br>Osaka, Japan   |
| 4 | Intended or current use of substance:  | Filtering aid.  |
| 5 | List the "mode of action" of the substance:  | N/A   |
| 6 | Substance source:  | Magnesium Carbonate consists of odorless, white hexagonal crystals.   |
| 7 | Substance processing procedure from basic component(s) to final product:*                  | N/A   |
| 8 | Summary of available previous reviews by State or private certification programs or other: | N/A   |
| 9 | Information re EPA, FDA and State regulatory authority                                     | The FDA of the USA affirmed in their final rule that magnesium carbonate is generally recognized as safe (GRAS) for use as direct human food ingredients (FDA85).   |

Occasion Sheers  
April 1, 2004

|    |  |  |
|----|--|--|
|    | registrations including reg numbers:   |  |
| 10 | Chemical abstract Service (CAS) number or other numbers:   | CAS Number: 546-93-0   |
| 11 | Substance's physical properties and chemical mode of action;<br>(a) chemical interaction<br>(b) toxicity and environmental persistence<br>(c) impacts of manufacture | (a) N/A<br>(b) N/A<br>(c) N/A  |
| 12 | MSDS sheet:  | N/A  |
| 13 | National Institute of Environmental Health Studies.  | N/A  |
| 14 | Comprehensive substance research reviews and bibliographies including contrasting positions:   | N/A  |
| 15 | Petition Justification Statement:  | Magnesium carbonate is used as a filtering aid, to clarify drinking water etc. |

Evaluation Criteria for Substances added to the National List

Category I. Adverse impacts on humans or the environment?

Substance Magnesium Carbonate

| Question  | Yes | No | N/A | Documentation<br>(TAP, petition, regulatory agency, other)  |
|---|-----|----|-----|---|
| 1. Are there adverse effects on environment from manufacture, use, or disposal?<br>[§205.600 b.2]                     |     |    |     | Magnesium Carbonate is recognized as safe for human food ingredients (GRAS).                              |
| 2. Is there environmental contamination during manufacture, use, misuse, or disposal? [§6518 m.3]                     |     |    | N/A |   |
| 3. Is the substance harmful to the environment?<br>[§6517c(1)(A)(i);6517(c)(2)(A)i]                                   |     |    | N/A |   |
| 4. Does the substance contain List 1, 2, or 3 inerts?<br>[§6517 c (1)(B)(ii); 205.601(m)2]                            |     |    | N/A |   |
| 5. Is there potential for detrimental chemical interaction with other materials used?<br>[§6518 m.1]                  |     |    | N/A |   |
| 6. Are there adverse biological and chemical interactions in agro-ecosystem? [§6518 m.5]                              |     |    | N/A |   |
| 7. Are there detrimental physiological effects on soil organisms, crops, or livestock?<br>[§6518 m.5]                 |     |    | N/A |   |
| 8. Is there a toxic or other adverse action of the material or its breakdown products?<br>[§6518 m.2]                 |     |    | N/A |   |
| 9. Is there undesirable persistence or concentration of the material or breakdown products in environment?[§6518 m.2] |     |    | N/A |   |
| 10. Is there any harmful effect on human health?<br>[§6517 c (1)(A)(i) ; 6517 c(2)(A)i; §6518 m.4]                    |     | NO |     | This substance is generally recognized as safe when used in accordance with good manufacturing practices. |
| 11. Is there an adverse effect on human health as defined by applicable Federal regulations?<br>[205.600 b.3]         |     | NO |     | This substance is generally recognized as safe when used in accordance with good manufacturing practices. |
| 12. Is the substance GRAS when used according to FDA's good   | Yes |    |     |   |

Decision Sheet  
April 1, 2004

|   |  |  |     |  |
|---|--|--|-----|--|
| manufacturing practices?<br>[§205.600 b.5]  |  |  |     |  |
| 13. Does the substance contain residues of heavy metals or other contaminants in excess of FDA tolerances? [§205.600 b.5] |  |  | N/A |  |

<sup>1</sup>If 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 Magnesium Carbonate

| Question   | Yes | No | N/A | Documentation<br>(TAP, petition, regulatory agency, other) |
|--|-----|----|-----|--|
| 1. Is the substance formulated or manufactured by a chemical process? [6502 (21)]  |     |    | N/A |  |
| 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)] |     |    | N/A |  |
| 3. Is the substance created by naturally occurring biological processes? [6502 (21)]   |     |    | N/A |  |
| 4. Is there a natural source of the substance? [§205.600 b.1]  |     |    | N/A |  |
| 5. Is there an organic substitute? [§205.600 b.1]  |     | X  |     |  |
| 6. Is the substance essential for handling of organically produced agricultural products? [§205.600 b.6]   | X   |    |     |  |
| 7. Is there a wholly natural substitute product? [§6517 c (1)(A)(ii)]  |     | X  |     |  |
| 8. Is the substance used in handling, not synthetic, but not organically produced? [§6517 c (1)(B)(iii)]   | X   |    |     |  |
| 9. Is there any alternative substances? [§6518 m.6]  |     | X  |     |  |
| 10. Is there another practice that would make the substance unnecessary? [§6518 m.6]   |     | X  |     |  |

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

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

Substance Magnesium Carbonate

| Question   | Yes | No | N/A | Documentation<br>(FAIR, petition; regulatory agency; other) |
|--|-----|----|-----|---|
| 1. Is the substance compatible with organic handling? [§205.600 b.2]   | X   |    |     |   |
| 2. Is the substance consistent with organic farming and handling? [§6517 c (1)(A)(iii); 6517 c (2)(A)(ii)]   |     |    | N/A |   |
| 3. Is the substance compatible with a system of sustainable agriculture? [§6518 m.7]   |     |    | N/A |   |
| 4. Is the nutritional quality of the food maintained with the substance? [§205.600 b.3]  | X   |    |     |   |
| 5. Is the primary use as a preservative? [§205.600 b.4]  |     | X  |     |   |
| 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] |     | X  |     |   |
| 7. Is the substance used in production, and does it contain an active synthetic ingredient in the following categories:  |     | X  |     |   |
| a. copper and sulfur compounds;  |     | X  |     |   |
| b. toxins derived from bacteria;   |     | X  |     |   |
| c. pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals?   |     |    | N/A |   |
| d. livestock parasiticides and medicines?  |     |    | N/A |   |
| e. production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleaners?   |     |    | N/A |   |

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